

The Ohio State University Bulletin



SEPTEMBER 1948

THE VETERAN MOVES IN . . .

Seventy-Seventh Annual Report of the
President of the Ohio State University

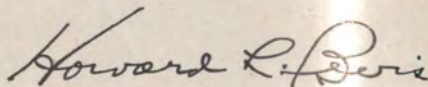
to the Board of Trustees, the Governor, and Citizens of Ohio

THE HONORABLE CHARLES F. KETTERING
Chairman, Board of Trustees
The Ohio State University

Sir:

I have the honor to present through you to the Board of Trustees of The Ohio State University, for transmission to the Governor of the State of Ohio, the seventy-seventh annual report of The Ohio State University for the year ending June 30, 1947.

Respectfully submitted,

A handwritten signature in dark ink, reading "Howard L. Bevis". The signature is written in a cursive style with a large, sweeping "H" and a long, trailing "S".

HOWARD L. BEVIS, *President*

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The Veteran Moves In

IN A YEAR marked by the greatest demand on its facilities, the University saw within the near future the realization of the biggest building expansion program in its history. It was a year of accomplishment—the University absorbed its largest enrollment to date—and a period of intensive planning for a new era just ahead.

The record enrollment in the Autumn of 1946 brought with it more than 14,000 veterans and a correspondingly different campus. Baby carriages made their appearances on campus walks.

The transition from war to peace became an accomplished fact. The veterans moved in, and, thanks to many temporary buildings, space was available.

It was a year of memorable events, new firsts, new records. The School of Home Economics celebrated its fiftieth anniversary late in 1946, attracting to the campus many of its 8,000 alumnae. A similar anniversary was observed earlier in 1946 by the University's Franz Theodore Stone biological laboratory near Put-in-Bay on Lake Erie. A three-day ceremony highlighted the occasion. In the College of Arts and Sciences a new, broader curriculum leading to the bachelor of arts degree was adopted.

Faced with prospects of an even greater enrollment in the year ahead, the University administration was cheered by the fine support given by the governors and legislatures. Emergency funds were voted in July, 1946, at a special session of the 96th General Assembly. Again at the regular session of the 97th, in 1947, increased funds were voted for general operations and an expanded building program.



Howard Landis Bevis

Preliminary sketches and plans were drawn for the new Medical Health Center as well as other new buildings and additions for which funds were provided by the legislature. Members of the Board of Trustees also declared the proposed new student Ohio Union "a going project." Visualized by all was the finest student union in the nation.

Tribute is owing members of the Board of Trustees who gave unselfishly of their time and attention in a period of heavy demand. Charles F. Kettering served as chairman during the year; Lockwood Thompson became the new member, succeeding Leo L. Rummell whose board term expired.

Again I am indebted to members of the administrative staff, deans of the various colleges and directors of our special schools for their part in the preparation of this report. All are justly proud of their accomplishments during the year—we join them in that pride.

HOWARD L. BEVIS,
President

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The Board of Trustees



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LOCKWOOD THOMPSON

The President's Office

Instruction

ENORMOUS enrollment at the undergraduate level, with its large percentage of veterans, placed an exceptional burden on the teaching facilities



Harvey H. Davis
Vice President

of the University during the year just closed. It was imperative that the course offerings be adjusted to meet the needs of this enrollment as well as to be appropriate to the function of a university in educating youth for the post-war world.

The problem was met in part by increasing very greatly the number of sections of existing courses which were offered, and by offering them in additional quarters of the year. Also, it was necessary to add many new courses, some of them on a refresher basis to meet the needs of returning veterans who needed work of this kind in order to restore their knowledge about courses which they had had before entering the service, and thus to prepare them to continue with advanced work.

In a similar manner, it has been necessary to arrange new curricula better to meet the needs of the enrollment and among such curricula are to be found the new Curriculum for the Bachelor of Arts degree which was an outgrowth of long study by the College of Arts and Sciences, and which it is believed will be a distinct improvement over the old curriculum. Other curricula are the new one leading to a Major in Mathematics, made necessary by the tremendous emphasis upon mathematics in modern society, and one in Labor-Economics to aid in the preparation of specialists in

labor problems so prominent in our current society. A new Curriculum in Dental Technology has been inaugurated with financial assistance from the Kellogg Foundation. This is a two-year program and, in general, not work of a type suitable to a university, but it seemed necessary to develop this course in connection with the College of Dentistry, and it was accordingly approved. The Department of Geology made notable strides during the year in strengthening and modernizing its offerings and in expanding its facilities for field work. In meeting our obligations to the public schools of the state, new curricula in Dental-Hygiene and in Psychology and Guidance have been approved in order to prepare specialists for work in these fields in the public schools. The College of Commerce and the School of Home Economics have been working for some years to develop a Curriculum in Restaurant Management and this has now been approved for immediate operation.

The five-year program in Engineering took effect during the year just closed and, with its combination feature by which brilliant students may through proper procedure secure a master's degree concurrent with an engineering degree, seems to meet adequately the needs in that field. The College of Pharmacy is also moving to a five-year program, but in this case it will be divided into two years of pre-pharmacy and three years of pharmacy. This move is hailed by the profession as an important forward step as will be evidenced by the following quotation from an editorial in the May, 1947, issue of the *Journal of the American Pharmaceutical Association*:

A good many four year graduates tell us, rather critically, that their education has not prepared them to meet the public or members of other health professions on the cultural plane that has come to be expected of professional men; that it has not prepared them to fill the

role of a final source of information on drugs. It is true that pharmaceutical education today is not on an equivalent plane with education in the other health professions.

It is this problem that Dean Christensen and his associates at Ohio State University have forthrightly attacked by being the first to adopt a required five year program. Effective in July, 1948, the curriculum will demand a two year pre-pharmacy course as a prerequisite for a three year professional curriculum.

This may well mark another turning point in the progress of pharmacy. Since we have sixty-seven colleges it is well that a few strong institutions have the initiative and courage to pioneer in meeting the needs of modern pharmacy. It is noteworthy that Ohio State has taken the lead in practical application of progressive concepts to fashion tomorrow's pharmacists; for this institution is credited with first making the four year course compulsory (although it had been first offered optionally at other schools).

Another good example of the way our University is growing in stature and reputation is furnished by our Department of speech. During the past year, as a result of important additions to staff, that department has achieved national reputation and its members are contributing to leadership nationally in the field of speech education. Their clinic for research and teaching has made particularly important growth and is serving campus and off-campus agencies.

One of the very serious problems this and other large universities are facing is that of the exceptionally large number of pre-professional students who are unable to secure admission to the desired professional college. Here, as elsewhere, there are from five to ten times as many qualified applicants for admission to the professional colleges as can be admitted. Three possible solutions to the problem seem to be:

- (a) Reduce the number in the pre-professional program.
- (b) Admit more students to the professional college.
- (c) Adjust the pre-professional work so as to make it count as much as possible toward some other curriculum in case admission to the appropriate professional college is impossible.

We have made some headway on each of these in that counseling service helps to convince some individuals not to

enter the crowded pre-professional programs, and some expansion of the professional courses has been possible. Dentistry, for example, is taking eighty beginners this year as compared with sixty on the pre-war basis, and other colleges have expanded quotas as much as possible. We have been able to adjust the pre-professional curricula to give more value to the courses as preparatory to work other than the profession sought. For example, the College of Agriculture will now offer a pre-professional program for Veterinary Medicine. Individuals who have had this work can shift to a Curriculum in Animal Husbandry with very considerable profit in case they are not admitted into Veterinary Medicine. This opportunity was less available when the pre-veterinary course was offered only by the College of Arts and Sciences.

To meet the instructional problems incidental to handling the enormous undergraduate enrollment, several modifications of procedure have been inaugurated. For instance, in some cases classes up to five hundred are handled in a single section with the use of loud speakers, special teaching devices and monitors. Careful check of this work indicates that it can be done very effectively in certain areas. The Teaching Aids Service in the Bureau of Educational Research has been temporarily expanded so as to enable faculty members all over the campus to secure help in preparing and using visual and auditory aids. A large number of departments profited by this opportunity during the year just closed. The appointment of assistant deans in some of our large colleges and the designation of additional supervisors of elementary instruction have likewise aided in handling the new problems.

Good progress was made in securing large numbers of ranking or promising scholars for our staff. As an example of this, at least six first-rate people were added in the Department of English;

two in German; five in History; one in Philosophy; two in Romance Languages; two in Journalism; three in Bacteriology; four in Chemistry; four in Geology; four in Physics; and four in Mathematics. This illustration is from the College of Arts and Sciences alone. Other colleges have been similarly successful.

The University has lost a few excellent men to special situations in other universities and in business but this is normal, since some exchange between institutions is inevitable.

The reports on staff activities show the vast and varied contributions of the University staff to scholarly literature and to meetings of learned societies where faculty members present papers. Most of the faculty belong to state and national organizations, and most departments have from one to several officers of state and national learned societies on their faculties.

As an outgrowth of the University's long-term plan of a year ago, the Faculty Council has recommended the creation of a distinguished professorial rank, to be named in the case of each individual for some outstanding person.

Research

As was indicated in the long-term plan submitted to the Board of Trustees last year, the University puts great emphasis on its program of research. The past year has seen very satisfactory advance in this field. The Research Foundation has carried on a large number of important projects as can be noted from the contracts cleared through its minutes every month. From the net profits of these enterprises, the Foundation has established a policy of granting funds for research to the regular departments of the University through a special committee appointed by the President. The amount available for expenditure during the past year has been approximately \$100,000. The distribution of this fund was such that slightly more than \$72,000

was allotted to twenty-one projects in the physical sciences and \$23,000 to eight projects in biological sciences, leaving only a small amount for projects in the humanities and the social sciences. The committee this year felt that a somewhat more equitable distribution among the four fields should be sought and, accordingly, allocated funds for next year's operation somewhat more evenly among the fields. It is not expected that any arbitrary percentage allocation will be made, nor is there any desire to allot aid to a poorly designed projects merely because it is in a particular field.

The Development Fund of The Ohio Ohio State Association continued to make its important contribution to research on the campus. In keeping with its established policy, it produced funds for the initiation of numerous new research enterprises.

The Federal Legume Seed Laboratory was located in Columbus this year in close association with the University's Department of Agronomy and will be moved to the campus as soon as facilities can be provided. This brings to the University community nine outstanding biological scientists and comes in part because of the recognition gained through the work of the Department of Agronomy in the development of hybrid seeds.

Notable progress in the field of aviation research has been made during the year. With the assistance of grants from the National Research Council, a program in flight training for persons with visual handicaps has been carried to completion. The findings were of great significance and Ohio State's reputation in this field is second to no other university in the country. In fact, the National Research Council is tending to concentrate all of its grants to this University and to discontinue enterprises at other places. In addition to the vision research, an important investigation into the causes of and pilot response to stall conditions in flying was completed this spring, and some preliminary work has been carried

on with reference to air transportation of perishable foods. Also, research in methods of crop dusting and of spraying for insect control has shown promising results.

The University's Department of Psychology which already occupies a very strong national position has had such an increase in demand for graduate work and particularly research in the clinical field as to make necessary some limitation on enrollment, and the rejection of several proposed contracts for research and training in the clinical field. Necessity for this action arose not only from inability to expand staff sufficiently to meet the need, but more importantly, because of limitations on space which could be allotted to this work.

It is not feasible in this report to attempt even a list of the myriad of significant research enterprises occupying the time of members of the faculty this year. I should like, however, to mention the fact that coordinated research programs such as those in personnel, in vision, and in nutrition and food technology have brought very promising results. One of the greatest strengths of a university such as Ohio State is the possibility of combining the efforts of such diverse areas as physics, veterinary medicine and medicine into a team for the purpose of exploring the effects of radio active materials in the treatment of human diseases through experimentation with animals.

Service

A state university, particularly one which combines a land-grant college with it, has a special responsibility for service of all sorts to the people of the state. The present year has been productive of many such services, some of them new. Almost innumerable conferences of business and professional persons have been held. The College of Commerce has been notably successful with its one day conferences for accountants, personnel workers and others. Other colleges have had many similar conferences in their appropriate

fields. An increasing number of short courses not granting university credit have been held. Among them are those for firemen, for frozen food locker operators, lumber dealers, and motor freight operators. These have been uniformly successful and have brought many letters of warm commendation from the cooperating agencies and the persons served. The Colleges of Dentistry and Medicine have continued with signal success their programs of short postgraduate training. These have been attended by practitioners from all over the country and have done much to promote professional competence among the participants and to develop good will for the University.

The laboratory short course inaugurated by the College of Veterinary Medicine for service to practitioners over the State was conducted for one week and met with enthusiastic response. Also in Veterinary Medicine, significant contribution was made to the poultry growers of the State by work on New Castle's disease which was started late in 1946, through assigning some staff time and through the employment of a laboratory technician. This disease was spreading at an alarming rate and urgent calls for help came from the poultry industry. There is every reason to expect that, under the closer coordination of the Agricultural Experiment Station with the University, long-term plans for integrating the work at Reynoldsburg with the Veterinary College may come to fulfillment.

Another example of a significant service to the State is found in the College of Agriculture through laboratory work in determining the cellular antigens in the blood of cattle. Only a beginning was made last year, but the enterprise has the enthusiastic support of the purebred cattle growers of the State and should shortly be on a self-supporting basis.

Special mention should be made of the University Graduate Center at Wright Field since it combines in one venture

instruction, research and service under the contract between the University and the Army. Resources of both are being pooled for solving research problems in

aviation, and the instructional program carried on by the University is of great service to the Army in holding and upgrading staff members at Wright Field.

The President's Office

Student Relations

THE Office of the Vice President in charge of Student Relations attempts to coordinate and direct the many functions and services of the following divisions of the University: University Health Service, Occupational Opportunities Service, Offices of the Dean of Men and the Dean of Women, Offices of the Registrar and University Examiner, Student Financial Aids Office, Office of the Director of Housing, Army and Navy



Bland L. Stradley
Vice President

ROTC's, and the Veterans' Center.

It was clear to all of us early in the year 1946-47 that our total efforts would have to be well directed and carefully coordinated if the University were to meet the emergency adequately. The initial steps were to determine policy, select trained personnel, and secure necessary funds and services. The responsibility for working out the details and for carrying out the general policies agreed upon was then delegated to those in charge of the divisions and to their respective staffs. Special attention can be given to only a few of the outstanding accomplishments of the year in meeting the emergency.

The first major problems of the offices in this area were the admission, the registration, and the housing of the thousands of students desiring to con-

tinue their education at The Ohio State University.

The Registrar and University Examiner has summarized elsewhere in this report the achievements of the Entrance Board and the Registrar's Office in the admission and the registration of this year's unprecedented student body.

Veterans' Center

Inasmuch as veterans comprised almost two-thirds of our large enrollment for the year 1946-47, the special problems relating to the registration of veterans under the G. I. Bill (Public Law 346) and Veterans' Vocational Rehabilitation (Public Law 16) were considered of prime importance. The Veterans' Center, established in the lobby of the Administration Building in the Autumn Quarter of 1945, was expanded in size and in function. Through its information service, the Veterans' Center directed the veteran to the proper office in the University or Veterans Administration for the discussion of his academic or personal problems. For Autumn Quarter 1946 the Center accepted and processed more than 6,800 Certificates of Eligibility and Entitlement for educational benefits under the G. I. Bill for veterans just entering training, handled the appropriate papers for approximately 275 new Public Law 16 trainees, and re-entered into training (completing all required Veterans Administration forms) over 7,100 veterans previously enrolled at The Ohio State University under Public Law 346 or 16—a total of 14,228, more than double the 6,548 veteran enrollment Summer Quarter 1946. Fees and orders for books, equipment, and supplies were approved for this entire group. During the year

the Veterans Administration was kept informed concerning the withdrawals, reduction in academic loads, attendance, grades, academic standing, etc. of the veterans they were sponsoring.

The enrollment of veterans under the two bills for Winter Quarter was 14,097, including 1,361 new trainees, and for Spring Quarter 13,962, with 760 new trainees.

During most of the year, Veterans Administration personnel were located in the Veterans' Center. In spite of the many problems and numerous forms involved the relationship between the University and the Veterans Administration has been good. In most instances, there has been a mutual understanding of problems and a fine spirit of cooperation.

The policy of The Ohio State University, in conformity with the wishes of the veterans, themselves, has been one of non-segregation of veterans. No special offices were set up for the academic counseling of veterans. No special courses (except brief refresher courses) and curricula were established. Rather, the veterans were assimilated into the student body. Veterans with unusual problems and needs were given individual attention by the regular college and personnel offices. In the various undergraduate colleges, individualized non-degree programs were planned to fit the needs of the particular veterans involved.

The Council on Veterans Affairs, appointed by President Bevis during the Summer Quarter, 1945, continued to coordinate and expedite the various services and opportunities offered the veteran by The Ohio State University. Through the releases of the Council, the college and personnel offices were kept informed of new procedures and policies relating to veterans.

Housing

The housing of students, especially married students, has been one of our greatest problems. Although the University has some dormitories for single

students, it has depended largely upon the City of Columbus for the housing of students. In this present housing emergency, it was the opinion of all concerned that a housing office should be established and a director selected to help single and married students find desirable places to live. The Director of Housing also assisted new faculty members in locating homes, and recently he has inspected some houses in the university district. Housing possibilities were investigated at Buckeye Lake, Magnetic Springs, Lockbourne Base, Port Columbus, the local Knights of Columbus Hall, and many other locations.

The Governor of Ohio and the State Fair officials gave the University authority to establish a trailer camp for 180 married students and their families on the State Fair Grounds, nine-tenths of a mile from the campus.

With the assistance of newspapers, radio stations, and spot announcements in theaters, housing was arranged for all of the single students admitted to the University. The University is indebted to the people of Columbus who opened their homes to students. Recognition should also be given to the sororities, fraternities, and church organizations for their contribution in meeting the housing emergency.

Winter Quarter, 1947, we were able to accommodate 450 single veterans in the River Road Dormitories.

The Occupational Opportunities Service

The Occupational Opportunities Service is a service agency for the development of, and for the encouragement in the use of, sound vocational guidance techniques for The Ohio State University and, in so far as feasible, for the agencies and schools in the State of Ohio.

Among the many functions undertaken by the Occupational Opportunities Service the following are most important: (1) rendering of complete vocational guidance to those requesting the service, particularly veterans, in order to

help individuals select appropriate vocational goals; (2) providing complete psychological testing services including development, administration, scoring, and interpretation of tests; (3) compiling and disseminating occupational information and other counseling aids, and the maintenance of an occupational information library for general use; (4) training of graduate students as vocational counselors (which has helped ease the great shortage of vocational counselors, particularly in veterans' counseling programs); and (5) promoting general research in the field of vocational counseling.

Although the general aim of the Occupational Opportunities Service is to serve all individuals possible, definite priority has been given during the past year to the vocational advisement of veterans of World War II. During the period of July 1, 1946 to July 1, 1947 more than 4,000 veterans received complete vocational guidance. The many non-veterans who also received counseling during this period in no way interfered with the veterans' program.

This tremendous load of veterans' counseling was carried out under very difficult conditions including the problem of maintaining a sufficiently large, qualified counseling staff. Every effort was exerted to satisfy the veterans' needs, and all veterans requesting counseling were given immediate service.

Approximately one-third of the veterans counseled were residents of the State of Ohio who were not enrolled in The Ohio State University. The remaining two-thirds were enrolled in the University and every effort was made to integrate the counseling received in the Occupational Opportunities Service with the counseling services available to the student in the various college offices.

The Occupational Information Library has been widely used by students of all colleges in the University as a means for broadening their knowledge of vocations. The library is kept up to date with con-

tinual additions of all pertinent publications.

Some of the normal functions of the Occupational Opportunities Services, other than vocational counseling, have obviously been hindered by the large veterans program during the past year. As conditions warrant, however, these functions will assume their proper proportion in the total program.

Student Financial Aids Office

During the past year the Student Employment Office was reorganized and renamed. The Student Financial Aids Office now serves as a clearing house for student employment, scholarships, and loans. In expanding the functions of this office, the Administration had two principal aims: (1) to coordinate the securing of employment and the awarding of scholarships and loans, and (2) to provide financial counseling for students. It is our hope that this new setup will make possible a more equitable distribution of financial aids.

Students applying for jobs during 1946-47 numbered 6,146. The office received 4,145 calls from employers seeking student workers. It is estimated that the office assisted students in earning \$973,114. The Student Financial Aids Office is coordinating as rapidly as possible the administration of undergraduate scholarships. Quarterly reports are now prepared for scholarship donors concerning the academic progress of the student recipients. During the year loans granted to students amounted to \$36,165.

Dean of Men and Dean of Women

The activities of the offices of the Dean of Men and Dean of Women are discussed in separate reports. The organization of the Social Board, made up largely of students, is perhaps the outstanding achievement of the year in the social program of the University. The offices of the Dean of Men and the Dean of Women played important parts in this new venture. The functions of the Board

include the providing of a well-rounded social program for students, the elimination, as far as possible, of injurious competition, and the maintenance of financial stability for all functions. Another outstanding feature of the social program of the University during the year has been the growth of the independent organizations—Civitas for independent men and Pleiades for independent women. Both organizations are large and active.

University Health Service

The University Health Service and the Department of Physical Education have played an important role in the rehabilitation of the veterans. It should be noted that the adjustment of the student to the individual physical education program is based on general and specialized case consideration of the medical aspects of the case by the Health Service staff and regular prescription in each case is forwarded to the Physical Education Department. Musculoskeletal, heart and circulatory, psychological, and neurological conditions, 305 in number, comprise the largest percentage of the 383 cases which have been fundamentally appraised and guided by the University Health Service. Excellent cooperative procedures within the Service and with the other agencies on the campus have been developed and put into practice for the total benefit of the veterans.

A record-breaking combination program of chest X-raying and skin testing for tuberculosis and histoplasmosis was conducted in exemplary fashion during Freshman Week. Thirteen thousand

student visits for X-ray of the lungs, double skin testing, special multiple form filling, and later, test readings were administered in six days, with true effectiveness. Eleven of the cases were of a type to make necessary withdrawal from college.

The mental health program of the Health Service has been increased and improved. The neuro-psychiatrist and regular staff member assigned in this field have seen 571 cases. Ten of this group have been classified as truly organic mental cases. Our program for epilepsy has been made more effective. The Health Service has cooperated with the Hearing and Speech Center in the broadening of the program. Considerable attention has been given by the Health Service, in cooperation with other agencies on the campus, to the development of an improved campus sanitation program. Some progress was made toward service to the faculty-employee group through a voluntary chest X-raying program offered to university faculty and employees during the year. While participation on the voluntary basis has not been large, approximately 400 have been examined.

The Health Service and related agencies on the campus have developed plans to follow in the event of an epidemic. An excellent relationship exists between the Health Service and the University Hospital, but there is great need for infirmary facilities. It is the hope of all concerned that infirmary facilities will be provided in the present University Hospital when the new Medical Center is completed.

The Registrar and Entrance Board

DURING the year 1946-47 more students were admitted to the University and registered in its various colleges than during any other year in its history.



Ronald B. Thompson
Registrar
Oct. 1944 - —

13,461 new students were admitted to the University, 9,117 of them being classified as freshmen. During the Autumn Quarter, 1946, 9,444 new students were taken into the University, with 6,825 of them classified as freshmen.

This extraordinarily large number

of new students admitted into the University resulted in the largest enrollment in the history of the school. During the academic year 28,582 different students were enrolled in the University, and during the entire fiscal year, including the Summer Quarter, 31,596 students were enrolled. The colleges having the largest enrollments were in order: The College of Commerce with 6,477; the College of Arts with 6,429; the College of Engineering with 4,730; the College of Education with 3,907 and the College of Agriculture with 2,556.

The professional colleges, limited by facilities, were not increased in proportion to the other colleges. Consequent pressure for admission into these various professional colleges increased greatly during this year.

Students were enrolled from each of the eighty-eight counties in Ohio. A total of 26,219 students from Ohio were enrolled during the academic year, with 2,363 being enrolled from outside the state. Franklin County had the largest number of students enrolled from any one area of the state with 9,041 students enrolled during the academic year.

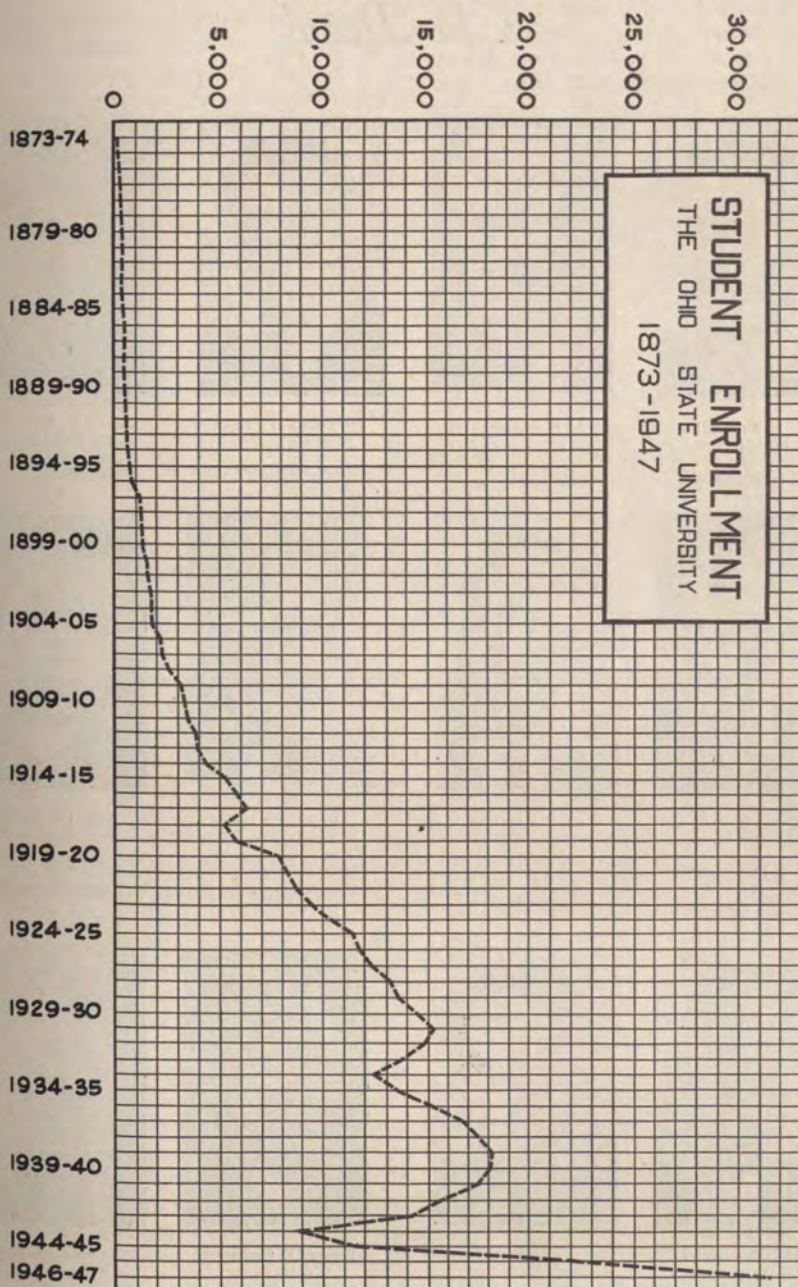
The excessive enrollment in the University has, of course, been in the freshman and sophomore levels. As these students move up into the junior and senior years additional problems of classroom space, staff and facilities will be presented. The "bulge" has not reached the upper years as yet. We have approached, however, the total number of degrees granted in our maximum pre-war years.

The number of degrees granted by the University by Quarters during the 1946-47 year are as follows: Summer Quarter 499, Autumn Quarter 401, Winter Quarter 556 and Spring Quarter 1,361. This makes a grand total of 2,817 degrees granted during the past year as compared with the previous pre-war peak years of 1939 when 2,923 degrees were granted, and 1940 when 2,827 degrees were granted.



THE LIBRARY

NUMBER OF STUDENTS



The Colleges The Deans

AGRICULTURE

LAW



L. L. Rummell
Sept. 1947 —

VET. MEDICINE



John F. Cunningham
July 1932 - Aug. 1947

MEDICINE



Jefferson B. Fordham
July 1947 —

DENTISTRY



Harry W. Vanneman
March 1946 - June 1947

EDUCATION



Walter R. Krill
Feb. 1946 —

COMMERCE
AND
ADMINISTRATION



Charles A. Doan
Dec. 1944 —

ARTS AND
SCIENCE



Wendell D. Postle
Sept. 1939 —

PHARMACY



Donald P. Cottrell
Sept. 1946 —

ENGINEERING



Walter C. Weidler
Aug. 1929 —



Harlan Hatcher
April 1944 —



Bernard V. Christensen
Oct. 1939 —



Charles E. MacQuigg
July 1937 —

Graduate School

THE growth of graduate education in the United States in the postwar years was anticipated by observers of educational trends. Several factors combine to present this unparalleled challenge to American universities. Some of the factors are the spectacular advances in certain areas of knowledge before and during the war, the demand for the privilege of advanced training on the part of increasing numbers of students, the



N. Paul Hudson
Dean
Sept. 1946 —

aid given by the Federal Government to veterans, the renewed activity in research with the return of investigators as well as students to universities, and the growth in graduate education in some fields previously not extended in that direction. Confronted with this difficult situation, the Ohio State University chose, as at the undergraduate level, to attempt to meet its responsibilities and opportunities. The Board of Trustees declared in September, 1946, that the University is to follow in the coming years the policy of emphasizing graduate and professional work and research.

This report reviews the objectives of the Graduate School in the first year after the declaration of this policy, relates such activities to the progress already made, and recommends certain measures for further implementation of the policy.

Changing conditions alter the details of administration and introduce new problems, but do not change the broad objectives of graduate education. The chief responsibilities of the Graduate School is the development of scholars and the promotion of original investigations for the advancement of knowledge. In addition to this classical concept of

graduate work, the Graduate School serves to train graduate students for their subsequent professional and vocational careers. Such a program implies qualified students, a thoroughly competent faculty, and adequate library and laboratory facilities.

The Ohio State University has resources which justify the confidence that the anticipated program can be realized. It has numerous educational and research activities already underway and centered largely on one campus. Its faculty contains many outstanding scholars and their fields of interest are varied. Its physical facilities are extensive. However, these resources are yet to be developed and utilized sufficiently to meet the intellectual and physical demands imposed by the circumstances of the times. The University has undertaken a large and complicated task, and only by improvements and additions to its faculty and facilities can it discharge its declared responsibilities in graduate education and research.

Some Problems Associated with Increased Enrollment.—Militating against some of the essentials of graduate study are the large number of students now presenting themselves and the limited number of highly qualified faculty personnel. During this past year, graduate students registered in the Autumn Quarter numbered more than 2100; this was 80 per cent above any previous Autumn Quarter enrollment. Contrary to the usual trend in the University as a whole, this number steadily increased through the year to over 2500 in the following Summer Quarter. This problem of numbers concerns us in connection with the competence of students for graduate work, qualified faculty personnel sufficient for the purpose, and adequacy of physical facilities.

To assure that students better qualified for graduate work are admitted, the Graduate Council has established minimal entrance requirements to be administered with the cooperation of the

Entrance Board. These requirements include a college record of at least 2.5 as an over-all point-hour ratio and of 2.7 in the major field of study (an all "A" record is 4.0). The rule requiring all students to take the Graduate Record Examination is to be enforced, the results to be considered in a student's record without being the sole criterion for admission. On the premise that one factor interfering with a student's doing good work may be his deficiency in English, those entering students with a point-hour ratio of less than 2.7 in all undergraduate work are required to take a proficiency examination in English. Remedial measures will be recommended for those not passing the examination. The Graduate Council has approved the limitation of enrollments in certain hard-pressed departments, with the proviso that the bases of limitation shall be approved by the Council.

The most important issue in graduate instruction is the provision of superior instructors. As the wave of postwar college enrollment advances upward in the scholastic scale, combined with the increment already evident, the problem of adequate instruction becomes increasingly acute. Moreover, serious competition is arising between the demands on the graduate faculty to teach undergraduate courses and its responsibilities in graduate education and research.

Parallel with the needs for a larger and superior faculty are the needs for improved library facilities. Shortage of library space makes this need especially acute. However, an increased allowance for purchases of research periodicals, reference works and books makes it possible for the faculty to procure research material of this sort in increasing amounts. An awareness of this fact and the increasing availability of material from abroad enable the University to build its library resources to a significant degree.

Physical facilities in the form of buildings lag far behind the space demands

of these times. Compromises, inconveniences and overcrowding are the order of the day. Until relief is obtained, there seems to be little that can be done except to improvise and to plan carefully for expanding demands. However, present limitations of space should be a factor in determining the numbers of graduate students admitted to a department, so that in trying to do too much a department does not sacrifice the research interests of faculty and students and impose an injustice on all.

Scholarly Activities of the Graduate School.—The Graduate School is concerned with large programs of graduate education and research, crossing department and college lines, as well as with problems of individual students and faculty members. In this role, the Graduate School has been interested in such programs as represented by the Institute of Nutrition and Food Technology, the Institute for Research in Vision, and the Radiation Laboratory Committee, all representing the association of faculty members, in whatever academic location, who are active in various phases of the respective broad subjects. These programs exemplify the group approach to the solution of complex problems, and it is anticipated that extensions in this type of activity will be made where appropriate and desired in other fields of the natural and social sciences. In the area of the physical and biological sciences, it is hoped that physical facilities for group research may be developed. A beginning of this sort has been made with the establishment of a shop for making and modifying special glass equipment for the general field of electronics and for other research involving glass apparatus.

During the past year, the Graduate School has continued its publication of scholarly works written by the faculty. The Graduate School recognizes its responsibility to the professions, the public and the faculty in presenting significant contributions through the printed pages,

and is in the process of constructing a program of publication within its financial limitations. It looks toward the time when it may more adequately discharge this responsibility for the dissemination of knowledge. The Graduate School also hopes to publish in a modest way the written works of graduate students, carefully chosen manuscripts worthy of recognition.

The Graduate School was pleased to cooperate with numerous departments in sponsoring special lectures by specialists eminent in their respective fields, who in coming to the campus brought to faculty and graduate students authoritative information of scholarly quality. About twenty such lectures were so sponsored in the past year.

Graduate School Administration.—It is clear from this condensed account of the demands, problems, policies and plans of graduate work and research that the administrative group of the Graduate School has had to undergo changes and enlargement. The growth of the University at the graduate level and in research activities has presented a variety of educational problems. Extension of graduate work in several areas of the University has called for detailed committee consideration and administrative attention. With the increase in graduate student enrollment, the student affairs of registration, petitions and candidacy for graduate degrees have greatly increased the business of the Graduate School Office. The Dean, who took office in September, 1946, is now aided by the services of two Assistant Deans, each giving half his time to Graduate School affairs. They are Dr. Ralph L. Dewey, Professor in the Department of Economics, and Dr. Harvey V. Moyer, Professor in the Department of Chemistry. Miss Alice A. Moran, Secretary, is assisted by additional personnel who have charge of such matters as student registration, financial records, appointments, publications, statistics, and records of candidates for degrees. In view of

increased numbers of students, registration each quarter has been carried on over a longer period of time.

The Graduate School has conducted studies of problems of graduate education, research and faculty personnel. These were for outside agencies as well as for the understanding and establishment of necessary procedures within the Graduate School. These studies have been carried out by Assistant Deans Dewey and Moyer and by committees of the Graduate School. In view of the increased number of educational problems, the Executive Committee has had a heavy duty conscientiously carried out. The Graduate Council has given long and detailed consideration to many problems dealing with specific issues and important policies.

* * *

College of Agriculture

DURING the academic year 1946-1947 a number of changes took place in department chairmen. Dr. R. D. Lewis, Chairman of Agronomy, resigned to become the Director of the Experiment Station of Texas. He was succeeded by Dr. Garth W. Volk. Upon the retirement of Dr. E. N. Transeau, Chairman of Botany, Dr. B. S. Meyer became chairman. The new department of Dairy Husbandry was established and Dr. William E. Krauss was made chairman. Some months after the death of Dr. Joseph H. Gourley, and after a careful appraisal of horticultural scientists everywhere, the choice as chairman fell on Dr. Freeman S. Howlett, who has been a member of the departmental staff for many years. As this is being written we cannot report a successor to Dr. Laurence H. Snyder, chairman of Zoology and Entomology, who has resigned to become Dean of the Graduate School at the University of Oklahoma.

Two rather notable additions to the College services and research program were made during the year. After sev-

eral years of planning and correspondence the Federal Legume Seed Improvement Laboratory was located in Columbus. It is planned to have it on the campus as soon as the necessary facilities are provided and for which funds have been appropriated. This laboratory brings nine outstanding biological scientists to the University community.

The second project is one that has the cordial support of organizations of purebred cattle breeders. It is aimed at determining the cellular antigens in the blood of cattle and will be of practical value to breeders as well as of great utility to the science of genetics.

For a dozen or more years a progressive effort has been under way to combine similar departments at the University and the Ohio Agricultural Experiment Station. During the year just closed the new department of Dairy Husbandry was merged with the similar department at the Experiment Station. Agronomy was again made a combined department. For some years the same chairmen have served the corresponding departments of Agricultural Engineering, Home Economics, Horticulture and Rural Economics. So it became easier to activate the long cherished plan to combine the College of Agriculture and the Agricultural Experiment Station under one head as Dean and Director. This will take place with the start of 1948.

The pressure on space has emphasized more strongly than ever the need of increased facilities and the need to proceed at once with the Agricultural Laboratories Building, the complete plans for which were approved by the University Trustees on July 26, 1941.

Agricultural Chemistry—Student enrollment in the department for the year was more than twice that for the previous year.

The major change in teaching activities during the past year has been in Food Technology. On October 1, 1946, Dr. Fred E. Deatherage joined the staff as Assistant Professor.

Agricultural Education—The School year 1946-47 definitely restored the program to pre-war numbers. In the graduate offerings, an increase in registration was also experienced. A significant study completed by Dr. Ray Fife was that involving an appraisal of the programs of Future Farmer Chapters on both a local and state basis.

Agricultural Engineering—Several special short courses were conducted in part or entirely by members of the staff. The 4-H Club Tractor School and Lumber Dealers' Training School are examples. New courses in Farm Shop were offered. Changes in advanced machinery and power courses were made to adapt offerings to students in agricultural and engineering curricula.

Agricultural Extension—Agricultural Extension helped farmers with their peacetime and homemaking problems. This not only included the usual help in the production of crops and livestock, but called for more attention on projects relating to marketing and distribution.

Postwar changes in ability of farmers to travel and attend educational meetings became apparent in attendance figures for Farmers' Institutes and for Farm and Home Week at Ohio State University. The total of 300,294 persons attending Ohio Farmers' Institutes in 1946-47 was 7 per cent greater than the 1945-46 total. The 1947 Farm and Home Week was attended by 7,349.

The enrollment of 4-H clubs increased 15 per cent in 1946, and early reports for 1947 indicate the upward trend is continuing. Group and individual interest in home economics extension projects shows the same general improvement in 1947.

Greater federal appropriations due to the Bankhead-Flannagan Act permitted increases in Extension personnel. The number employed in state and county work is at an all-time high. Seventy counties now employ home demonstration agents, and requests from other counties indicate each of the 88 Ohio

counties soon will have a home agent. Ohio counties have been liberal in increasing local appropriations to provide money to pay expenses of new county extension agents.

The state staff has been strengthened and increased to meet requests for assistance with rural health problems, consumer education, labor saving equipment, construction and remodeling of farm buildings, vegetable and ornamental gardening, agricultural outlook information, improved methods of marketing crops and livestock, and organization of discussion groups interested in economics and social problems.

The change in the attitude of rural people also is indicated by calls for more bulletins on farm and home subjects. Farmers have more time for reading and more confidence of being able to complete improvements which are planned. One of the largest and most conservative daily papers in the state prints a page of farm news for the first time in its history. Facilities for broadcasting information by radio have improved. The two largest radio stations in the state cooperated with the Extension Service in special radio broadcasts for Ohio fruit growers.

The Farm and Home Hour, broadcast daily except Sunday from University Station WOSU, continues to be a valuable means of reaching farm people with timely information. Through letters received and comments made by farm people, there is evidence that the number of listeners is increasing and that rural folks like the kind of program presented.

Agronomy—The scientific management and improvement of both soils and field crops is the special province of agronomists in the University Department of Agronomy. Success in these fields has been accomplished by the cooperative action of the resident teaching staff, research specialist, and extension specialist of the Ohio State University, the Ohio Agricultural Experiment Sta-

tion, and the Agricultural Extension Service.

In 1946-47 a total of 642 undergraduate and graduate students were enrolled in courses in Agronomy as compared to 236 in the previous year. Graduate student enrollment increased from 6 in 1945-46 to 23 in 1946-47.

The department has been active in research work in the fields of soil science and field crop breeding, culture and management. Outstanding work has been done in the development of new corn, wheat and soybean varieties. New research work has been started to determine the effect of soybeans on the physical condition of soils. This work will be correlated with similar investigations at the Ohio Agricultural Experiment Station where soybean fertility studies are being conducted. The department is cooperating with the Soil Conservation Service and the Ohio Agricultural Experiment Station on Drainage problems in which the depth and spacing of tile drains is to be studied in relation to various kinds of cropping systems. Many research problems of long standing are being continued.

Animal Husbandry—Student attendance reached a new peak in the area during 1946. Twelve hundred twenty-five students were enrolled in Animal Husbandry courses. During the war and since the war, the major emphasis in livestock production has been in the areas of meat, milk and wool. The number of Percheron and Belgian horses has been reduced. Beef cattle sales totalled almost \$26,000, a record for beef cattle receipts in one year at Ohio State. Cattle were exhibited at county fairs, the Ohio State Fair and the Chicago International. The department has the best crop of Southdown lambs ever owned at Ohio State University. At the Chicago International, 15 wether lambs sold for almost \$1,000. The swine herd is composed of approximately 50 brood sows representing four breeds. The 1946 pig crop was unusu-

ally satisfactory from the standpoint of numbers and sales amounted to approximately \$18,000.

Extension projects covered beef cattle feeder tours, pure-bred beef cattle shows and sales, 4-H Club steer shows and sales, the Ohio Lamb and Fleece Improvement project, "Ram Days" Association sales, parasite control and sheep dipping services (290,000 head of sheep were dipped), the development of the DDT spraying of sheep, 145 lamb pools for marketing lambs, six sheep shearing schools, sow testing program of performance, tours and swine breeders Field Days, ton litter contest, pig brooder demonstrations and program for Bang's testing sows.

Nutrition Research (Animal and Dairy Husbandry)—During the year 1946-47 research work on the following nutrition subjects was in progress: The effect of soya-lecithin on the absorption and utilization of vitamin A; the vitamin A, carotene and riboflavin content of cow's colostrum; the transfer of vitamin A from mother to young and the value of colostrum in calf feeding.

Meats Division—In 1929, the Meats Laboratory began to function as the source of supply for all meat consumed by students in campus dining halls, the Faculty Club, and the University Hospital.

Botany—During this year, especially during the Fall and Winter Quarters, enrollment in elementary courses reached an all time high. There were also substantial increases in enrollment in most of the advanced courses. Dr. Clyde C. Allison was appointed as a professor to help strengthen advanced undergraduate and graduate offerings in the field of Plant Pathology.

Dairy Husbandry—The newly-created Department of Dairy Husbandry became officially a part of the College of Agriculture on October 1, 1946, with Dr. William E. Krauss as chairman.

Members of the resident instruction

staff were Professors T. S. Sutton and S. M. Salisbury, Assistant Professor W. J. Brakel, and H. E. Kaeser.

During the Autumn, Winter and Spring quarters, 533 students were enrolled in Dairy Husbandry courses and one course given jointly with the Department of Animal Husbandry. This figure includes those attending the Artificial Insemination and Testers' short courses given each quarter.

Also inaugurated during the year was the foundation work for the establishment of a blood typing laboratory which will offer services to breeders wishing to establish cattle parentage. At the same time research materials will be made available through the project for the advancement of the science of dairy cattle breeding.

Dairy Technology—Enrollment in the Department of Dairy Technology was not as high as it was previous to the war. There were 22 students graduated but the industry needs from 30 to 50 annually. In order to bring to the attention of high school graduates the great demand for dairy technologists, the two Dairy Technology Societies (Columbus and Cleveland) offered three scholarships during the past year for seniors in their respective counties to enter the Department of Dairy Technology. These Societies are offering four scholarships next year.

Home Economics—One important event during 1946-1947 was the celebration of the fiftieth anniversary of the establishment of the Department of Domestic Science. Official delegates from 28 states and 75 universities, as well as hundreds of alumnae and students, attended the two days of festivities. Leaders from education, business and research presented their reviews on past accomplishments and future goals in the field of Home Economics. Exhibits in each division of the School, teas, a formal dinner for the official guests, and a convocation at which Miss Edna N. White

was presented with an honorary Doctor of Laws Degree, were included in the program.

Some of the staff were new during 1946-1947 and contributed to an enlarged program of instruction and service: Dr. Dorothy S. Lyle, in charge of the program of research for the Ohio Dyers and Cleaners Association; Miss Lucille Alexander, first staff member to give full time to guidance service for students; Miss Frances Urban, in charge of the home management laboratory with an infant in each residence for the first time; Miss LaVelle Wood, head of the Division of Institution Management and Mrs. Eloise S. Rice, teacher of Foods and Nutrition.

Approval of the Graduate School was given for the programs leading to the doctor's degree in the areas of Home Economics Education and Nutrition. The first seminar in home economics education for doctoral candidates was held during the Autumn Quarter. A student from Switzerland was the first recipient of a scholarship offered jointly by the American Home Economics Association and the Home Economics Club. Her interest was in home management and the program of the extension division.

A file of graduates and former students has been brought up to date and placement service has been put into operation by Mrs. Faith Lanman Gorrell. Since recruitment of students is one of the needs as shown by the discrepancy between supply of and demand for our graduates, a sound movie was planned and filmed which may give prospective students information about the college program in home economics today. The title, "Footsteps to the Future."

Student enrollments in Home Economics remained rather high during the war; there was a slight increase during the past year. For the four quarters the figures show: In 1944-45, 1469; in 1945-46, 1707; in 1946-47, 1741.

Dr. Gladys Branegan has been chairman of an American Home Economics Association Committee on criteria for evaluating college programs of home economics and has made some visits to other colleges to study their programs. Dr. Ivor Spafford spent three months here directing the tabulation of data for this committee.

New equipment has been provided for several departments. For the textiles research some of the purchases were made by the University, some by the Ohio Association of Dyers and Cleaners. Such technical instruments are also available for use by graduate students for the research under the auspices of the Ohio Agricultural Experiment Station and contribute to the educational program. In the nutrition division, new equipment provided by the University aids the program of research of graduate students as well as that of the Ohio Experiment Station. A cooperative project with the Ohio Association of Ice Industries concerned with "Consumer Reaction to Iced Vegetables in Retail Stores" was completed during the year, but the equipment used was removed.

Horticulture and Forestry—Heavy enrollment of students, the largest proportion of which intended to specialize in floriculture and ornamental horticulture, characterized undergraduate instruction in this department. Graduate student enrollment attained pre-war levels. The demand for increased attention to the processing field led to plans for establishment of the new division of Horticultural Products. Expansion of instruction and research in Vegetable Crops was requested by the industry and plans in this direction were formulated.

Physiological research in connection with the handling and distribution of fruits and vegetables, a phrase of major importance, received initial attention. The prepackaging of flowers was given particular study by the floriculture staff members and outstanding were the number of visitors who came to observe

and study the work being carried on in connection with the soilless culture of floricultural plants.

The schools for florists and nurserymen were widely attended by visitors from many states and Canada. The increased attention given to adult education has been one of the features of the work of the department, a fact which can be well understood in view of the increasing importance of fruits, vegetables, flowers, and nursery products in the agricultural economy of the nation.

Poultry Husbandry—Dr. R. George Jaap was employed as poultry geneticist with the rank of professor, beginning the autumn quarter, 1946.

Three research projects were concluded during the year: (1) A project sponsored by the Quartermaster Corps dealing with the microbiology of eggs; (2) A project sponsored by General Electric Company, investigating the use of germicidal lamps in poultry production; (3) A project sponsored by the Schenley Distilleries dealing with the investigation of distillers' solubles.

Projects still underway are: (1) Refrigeration of poultry and eggs sponsored by the Refrigeration Research Foundation; (2) A study of hatchability of chicken eggs; (3) Problems involved in the incubation, rearing and management of geese; (4) The evaluation of breeding methods—a new project. This project is sponsored by Swift and Company with a grant of \$25,000.00 to cover a period of five years, and (5) Packaging and processing of poultry products and their influence on taste and keeping quality. This project was sponsored by the Development Fund.

Rural Economics and Rural Sociology—Student enrollment during the year 1946-47 was nearly three times that of the previous year. The University approved a new Rural Economics course for freshmen. Four short courses were offered during the year, one for Grange lecturers, one for rural ministers, one on

milk marketing, and one for farm land appraisers.

In the field of research, a grant of funds from the State Department of Public Welfare enabled expansion in rural health studies. During the year further time was given to the development of an expanded research program in the field of farm marketing in anticipation of the passage of the Hope-Flanagan Act which would allocate additional funds to the Agricultural Experiment Station for research, particularly in the field of farm marketing.

Zoology and Entomology—Much of the year was spent on two main objectives: first, caring for the tremendous increase in enrollment, and second, working on the detailed plans for the new additions to the building. The plans for the additions to the building were very carefully worked over and put in final shape by a committee, with the efforts of the whole department.

Three men from the Agricultural Experiment Station at Wooster were given assistant professorships in the department. Although they will remain at Wooster, they will supervise the work of graduate students who will spend part of their time at the Station. This ties in the research work of the Station still more closely with the research work of the department.

Two additional bound volumes of the current research publications of the members of this department were prepared. These include 78 scientific papers published in various technical and scientific journals. A list of the functions of the department was prepared at the request of a University committee, and the list was made available to the administration.

The department took a very active part in the establishment of the Federal Research Unit on Legume Seed Production which has been established in Columbus. Staff entomologists, apiculturists, and geneticists will work closely with this unit.

Arts and Sciences

THE College of Arts and Sciences had its full share of the challenging problems which unprecedented enrollments brought to the University in 1946-47. The task of providing competent instruction for all who came or returned to the campus after the war was indeed a heavy one. But it was made even more difficult by the need for pressing ahead to the College of the future. The job was not finished when teachers were found for scores of new elementary classes. The College dared not neglect research upon the highest level if it hoped to play its full part in solving the urgent problems of a post-war world. Enlargement of the permanent faculty had to be carried forward with vigor but also with great care. There was need for new programs of study designed to take full advantage of the broadening resources of a College of Arts and Sciences while, at the same time, developing the student's ability to study intensively in his field of specialization. Thus the task was far from the simple one of putting teachers in classrooms. It was a manifold and demanding one.

A record number of 5,783 students enrolled in the College of Arts and Sciences for the Autumn Quarter, 1946; double the enrollment of six years earlier. While new temporary classrooms were being hurried into readiness and the college office was expanding into basement rooms, more than 6,000 schedules were approved and sent to the Registrar.

In 1946-47, the ratio of veterans to the total enrollment, which had climbed from 8% to 49% within the preceding year, levelled off at a point above 50%, as the following table indicates.

A COMPARISON OF TOTAL REGISTRATIONS AND VETERAN ENROLLMENT IN THE COLLEGE OF ARTS AND SCIENCES FOR THE YEAR 1946-1947

Quarter	Total College Enrollment	Veterans* Enrollment	Veterans Percentage of
Autumn 1946. .	5783	3971	53.1
Winter 1947. . .	5455	2951	54.1
Spring 1947. . .	5011	2785	55.6

* NOTE: In the table, only veterans on Public Laws 16 and 346 are included.

Two thousand new Freshmen made up a third of the total enrollment. Almost two-thirds of them (61.2%) were veterans. More than three-fourths of the whole Freshman group were men (77.4%). Two-thirds of the veterans said that they would have managed to come to the University without public assistance but, naturally, they were taking part in the Government's scholarship program provided by the G.I. Bill. After the interruption caused by war, they were entering college as mature students. More than one-third were beginning as Freshmen at what we once called "graduation age," 22 years or more. Unlike pre-war Freshman classes in the College of Arts and Sciences, the class entering in 1946 was characterized by its definite educational objectives. Only 8.3% of the male Freshmen said that they had made no choice of a career field.

The veteran's emphasis upon pre-professional curricula was an old problem



presenting itself with a new degree of intensity. Of the Freshmen entering in the Autumn Quarter, 1946, 40% listed Medicine, Dentistry or Veterinary Medicine as their career choices. Another 22.3% indicated Journalism, Law, Optometry or Pharmacy as their choices. Thus almost two-thirds, predominately men, counted themselves as pre-professional students.

Recognizing the problem and the need for alternate choices on the part of those who might be unable to enter professional schools, the College intensified its interest in testing and guidance. New pre-professional programs requiring two years of preparatory work prior to entrance into Pharmacy and Optometry were made to conform to standard Bachelor of Science curricula to ease the transfer of students to other science fields when necessary. Other pre-professional programs were also kept flexible enough to be adaptable to standard degree programs. Deeply concerned over the large number of pre-professional students who would never gain entrance to the professional Colleges, Junior Dean Guthrie made a survey of Schools and Colleges of Medicine, Dentistry and Veterinary Medicine in the United States to discover precisely what the plight of pre-professional students might be.

The year gave ample evidence of the kind of academic performance which could be expected from the Arts College veteran group. On the one hand, the Ohio State Psychological Examination percentiles for veterans were below those of other students. The median for veterans entering in the Autumn Quarter 1946 was 51 percentile; for non-veterans median 57 percentile, suggesting that the ability level of the non-veterans was somewhat better than that of the veterans. On the other hand, the maturity, high interest and motivation of the veterans enabled them to show approximately the same academic performance as that of the non-veterans at the end of the school year. In a study of one thou-

sand Arts College veterans and non-veterans, about evenly divided in number, the median in point-hour ratio for the two groups differed by only one one-hundredth of a point. Another study of the 1946-1947 veterans in the College showed that those who had a pre-war record in the college could be expected to improve it upon return. It disclosed also a tendency for early gains to be shown when motivation and interest were high immediately upon return to classes, but that a let-down returning veterans to a more natural level of performance could occur in succeeding quarters.

Were the veterans quitting school after they had enrolled, as some had earlier predicted? In the Autumn Quarter, 1940, 2.8% of the students withdrew during the quarter. In the Autumn Quarter, 1946, 4.9% of the students withdrew within the quarter after enrollment and the withdrawal rate that quarter was almost exactly the same for veterans and non-veterans, indicating that outside causes which affect both veterans and others were responsible. Warning status and dismissals were applied under the same University rules in 1946-1947 which applied in pre-war years with the single exception that Executive Committee action was taken to establish a College policy to make subject to dismissal any student who failed all his academic subjects in a given quarter, and to make also subject to dismissal Freshmen who made less than .65 in their first or second quarter in College. Along with this, the College adopted a quite liberal policy with veterans who request reinstatement under such circumstances, and exercised its judgment to permit cancellation of grades both before and after service in cases where veterans were eligible for it under the University Faculty Rule. Recent study of the effects of cancellation of grades for Arts College veterans seems to have justified the action taken. The grades earned upon return have been better on the average

than those previously earned (with the cancelled grades excluded in the latter calculation).

With the concern for instruction, for counseling, for the scheduling and recording operations for which the College is responsible, the student's total welfare and development was by no means forgotten. The College helped foster its own departmental societies and the extra-curricular activities and organization that are related to its curricula and programs. During the year it also initiated, with the help of the Student Council of the College, a new series of Student-Faculty Hobby Interest Groups for non-majors in such areas as Literature, the Sciences, Music, Radio, Social Sciences, and the Drama. It helped establish a new student-published literary magazine. The College took a leading part in starting a University Lecture Series. It continued through its Student Council to sponsor an annual Scholarship Recognition Dinner for its outstanding scholars. In addition to providing orientation to the College itself through the Freshman Arts Survey course, it played a leading part in University Orientation for all entering Freshmen by lending part-time services of two Arts College staff persons who serve as Director and Assistant Directors of the University's Orientation Program.

In October, 1946, the new position of Assistant Dean was created to ease the heavy burden of administrative detail which falls upon the Dean of a large College. Frederic Heimberger, Associate Professor of Political Science, was appointed to this position on a part-time basis. Later in the academic year plans were made to fill the position of Placement Director which had been vacant during the war years. The new Director will be closely related to similar placement officers in other Colleges of the University so that he may serve both prospective employers and Arts College students to the best advantage.

In meeting the total needs of its stu-

dents in 1946-1947, the most urgent task faced by the College of Arts and Sciences was that of providing classroom instruction of the highest possible quality. There was no easing of the teaching emergency as the new academic year began. The Summer Quarter enrollment was more than doubled from the previous year and in the Autumn Quarter the College felt the full weight of a University registration of 25,000, almost 9,000 above that of the Spring Quarter. There was no choice but to continue for a time some of the emergency provisions made the year before. Again the fact that most of the new students were in their first or second years made feasible the employment of large numbers of graduate students, public school teachers, and others on temporary contracts. Again, the permanent faculty responded to the need for instruction on higher levels by giving up their fourth quarters off duty and by carrying heavy teaching loads.

However, the limits of emergency staffing were apparent to all. The College could not continue long with a staff including more temporary than permanent teachers and with virtually all of its better scholars bearing burdens which made research difficult if not impossible. Moreover, as large numbers of new students moved from lower to higher course levels, teachers having more advanced training would be essential. The only way out was to press vigorously for suitable additions to the permanent staff.

Most departments of the College had by this time formulated programs for future development and probable staff needs were known. As the year advanced overtures were made to men who, after careful investigation, seemed to meet these needs. Here was encountered in full force the intense competition of other schools and off-campus employers who were also seeking to obtain the services of the few available men of academic promise. There was a constant temptation to succumb to panic and offer

inflated titles and salaries. However, the certain knowledge of what this would do to the teaching staff in years to come curbed any tendency in this direction.

Before the end of the year the future faculty began to take shape and many notable additions were made to the staff. Some were upon the highest levels of rank and salary but many more were young men of promise who were employed as Associate or Assistant Professors. There simply were not enough great scholars to meet the needs of all universities and colleges and, furthermore, it often seemed to be good policy to employ a growing young man rather than an older one no matter how attractive his established reputation might be. There were some disappointments, to be sure, when the College saw itself priced out of the market. But by the end of the year substantial progress had been made in the task of adding not only teachers enough to meet the new need but also scholars who would keep the College well to the fore.

With the Winter and Spring Quarters came an increasing threat that many valuable men would be lost through competitive offers from other institutions. Hardly a day passed without news of the impending loss of men who were either irreplaceable or whose replacement could be effected only at high cost and by taking chances with unknown quantities. To meet these offers whenever possible seemed to be the only way to avoid disintegration of the teaching staff. But the College was reluctant to use all of its resources to give increases to the men, usually younger scholars, who were much in demand. It would have been disastrous to adopt a policy of advancement only in the event of a competitive offer. Fortunately, it was possible in many cases to make commitments not only to those who had received outside offers but also to their colleagues whose services were of equal value to the University. In other cases where immediate merit increases were not pos-

sible, the assurance that salary inequities would be adjusted at the earliest opportunity was sufficient to soften disappointment. The morale of the teaching staff over the next few years must now depend upon how well those assurances are kept.

Distinct improvement in the quality of teaching could be noted through the year. Mass instruction was reduced to a minimum as the enrollment tended to stabilize, even though at a new high level. Class sizes could be predicted with greater accuracy and there was less need for the unlimited sections which had been used in the previous year to care for unpredictable overflows. New teaching techniques and methods of supervision were developed to make the best use of comparatively inexperienced instructors. Newly added men of the professorial ranks began to give a lift to their departmental colleagues.

When the year closed the College of Arts and Sciences was on its way toward the distant goal of a teaching and research staff commensurate with its importance in the University.

One achievement of notable importance in 1946-1947 was the final completion and approval by the College Faculty of a new program of study leading to the Bachelor of Arts degree. For more than two years the Curriculum Committee had sought some way of giving greater meaning and body to this plan of study which, when the free elective system was combined with a vast new proliferation of specialized departmental courses, tended toward fragmentation and even chaos. The Committee's report recommended a broadened program of basic studies in the Freshman and Sophomore years. In the Junior and Senior years the student was to follow the previously existing pattern of moderate concentration in his freely chosen field of major interest. In addition the Committee recommended new requirements in composition, literature, philosophy and the arts in the last two

years. This report was placed before the College Faculty and, in seven extended meetings, it was carefully explained and vigorously debated. After several minor amendments had been made from the floor the report was approved by a majority of five to one.

Space will not allow a detailed account of the accomplishments of each of the 15 Departments and Schools within the College of Arts and Sciences. A list of publications alone would fill many typewritten pages. We must be content to give only a few hints of what went on in the classrooms, libraries and laboratories of this campus and in the broader fields outside. In research and writing members of the Faculty made scores of significant contributions ranging from a scholarly work on Jean Jacques Rousseau to research on tuberculosis and bacterial metabolism; from investigations of molecular structure to a volume on the medieval Syprus Passion Cycle; from a distinguished book on length and area in mathematics to two equally distinguished books in the field of journalism; from chemical research at high and low extremes of temperature to a study in history which won the Albert J. Beveridge award; from a monograph on the legend of Romeo and Juliet to a study of the problem of estimation in public opinion polls.

The influence of Arts College Faculty members was strong in national and regional professional societies. Two were editors of the recognized national journals in their fields and two others were the national secretaries of their professional societies. Many served as members of important boards and committees or were invited to read papers and lead discussion in their annual conventions.

While it is utterly impossible to give any adequate description of the interest and accomplishment of 15 Departments and Schools, two or three sentences about each may indicate in a very small way what was happening during the year.

Bacteriology.—Largely because of large

enrollment and increases in pre-professional programs, the Department carried an excessively heavy burden of classroom and laboratory teaching. Coupled with this increase in student numbers there was an acute shortage of teaching personnel which was only partially eased by the employment of new men during the year. In spite of these difficulties a vigorous program of research and graduate instruction was carried forward.

Chemistry.—The year 1946-1947 was primarily one of squaring away for the future after the disruptive years of war. Men who had performed extremely valuable services in national defense came back to the Department. Others who had made their contributions in the laboratories of this campus were able to shift their emphasis from the problems of war to those of peace. Throughout the year there was carried forward an intensive search for the additional scholars and teachers needed to provide course instruction, to guide an increasing number of graduate students, and to maintain the high research reputation of the Department.

Classical Languages.—A very gratifying increase in interest in the Classics offered ample evidence of both the quality of instruction being given and the continuing sanity of students after the tragedy of war. Although there were no new appointments to the permanent staff, efforts were made throughout the year to find men of quality who could be available later.

English.—The Department's first imperative was to provide instruction for an unprecedented number of beginning students, as evidenced in the Autumn Quarter alone by 178 sections of freshman composition and two vast sections of 400-500 each in freshman literature in addition to 23 smaller ones. While this burden was an exhausting one, it did not prevent members of the Department from publishing two books and 34 articles during the year. Notable addi-

tions were made to the teaching staff in all ranks but particularly upon the upper and intermediate levels.

Geology.—Thorough revision of its courses of instruction was a matter of major interest to the Department of Geology in 1946-1947. Plans were made to include a full quarter of field work in the West for majors and graduate students. As the year ended the first large contingent was ready to move from the classrooms and laboratories of Orton Hall to a newly established Ohio State University base at Ephraim, Utah.

German.—A truly distinguished program of research and writing was coupled with a careful consideration of courses and methods of teaching upon the beginning and intermediate levels. Special attention was given to the problems of foreign language instruction which have been brought to the fore by ever-increasing competitive demands upon the limited amount of time available to undergraduate students.

History.—While individual members of the Department carried forward study and writing with marked success in their special fields, a team of historians planned a new introductory sequence of three courses designed particularly for freshmen in the new Bachelor of Arts program. By the end of the year a carefully detailed experimental outline was ready for use in the Autumn Quarter, 1947. Notable progress was made by adding several highly qualified young men to the teaching staff.

Mathematics.—Like the Department of English, Mathematics faced the tremendous task of providing service courses for thousands of new students in practically all areas of the University. There was a real danger that this task might seriously interfere with, if not preclude entirely, research at the highest level. By the end of the year, however, the quantity and quality of scholarly publications by members of the staff had exceeded the record for any previous year. Several

members received signal national honors for the excellence of their research.

Philosophy.—The return from national service of Professors Luther Evans and Bruce Waters helped to ease the teaching shortage caused by increased enrollments and by the inclusion of philosophy courses in the new five-year curricula of the College of Engineering. The addition of Dr. Virgil Hinshaw to the staff forged an important link with the physical sciences.

Physics and Astronomy.—Professor Harold Nielsen became the new chairman at the beginning of the year and began at once to add strength to this Department which had suffered serious losses through retirement and outside competitive offers. In this he was eminently successful, bringing to Ohio State University a group of young physicists of attainment and promise. The first Symposium on Molecular Structure and Spectroscopy was held late in the year. This event, which received national and international attention and attracted more than 200 scientists to the campus, will be sponsored annually by the Department and the Graduate School.

Political Science.—The first task of the Department was to find a worthy successor to Professor Henry R. Spencer who, after many years of distinguished service, asked to be relieved of his administrative duties as chairman. After a careful search, Professor Harvey C. Mansfield, formerly of Yale University, was invited to become chairman in October, 1947. The second task was to add teaching and research strength to a staff which had been seriously overburdened by increased enrollments and losses to government offices. Two Assistant Professors were appointed within the year and a third Assistant Professor and three Instructors were selected for 1947-1948.

Romance Languages.—In addition to instruction in elementary and intermediate courses the Department enjoyed perhaps its most fruitful year in graduate

study and in writing by individual members of the staff. A group of rapidly developing young scholars gave promise of still greater departmental attainment in years to come. In order to enrich upper level study still more, arrangements were completed for bringing to the campus in the Summer Quarter, 1947, three distinguished visiting Professors from other universities here and abroad.

Speech.—The year 1946-1947 was one of continued reorganization and expansion. Course and staff needs in radio and in speech correction and hearing therapy were carefully appraised. By the end of the year the Department had revised and greatly expanded its course offerings in these fields and had secured the services of several new staff members. Instruction in theater, which had been strengthened in the preceding year, continued to develop in a most satisfactory way.

School of Journalism.—A remarkable growth of student interest continued during the year, as demonstrated by an increase from 38 majors in the Autumn Quarter, 1945, to 128 one year later and 196 in 1947. There was also a substantial increase in the number of graduate students. The Department took a major step forward by establishing a new Radio Journalism curriculum and employing Associate Professor Paul H. Wagner to serve in this area. Plans were made for adding another Associate Professor and an Instructor in 1947.

School of Optometry.—The Development Program of the Ohio State Optometric Association completed its campaign for \$100,000 which, when added to \$200,000 appropriated by the State Legislature, will provide a new building for the School. A new series of advanced courses leading to graduate degrees in physiological optics was instituted during the year. Plans were completed for shifting from a four year program to a new five year one, including two years of pre-professional training.

Commerce and Administration

THE year 1946-47, like the preceding year, was marked by a rapidly growing student body and by substantial increases in the size of our faculty and clerical personnel. As a result of the most serious teacher shortage in our history, it was, however, impossible to expand the faculty personnel in proportion to the growth in the student body.

The table which follows summarizes some of the more significant data relating to student enrollment.

COMPARATIVE STUDENT ENROLLMENTS FOR THE YEARS 1945-46 AND 1946-47

Quarter	Men— Veterans	Men— Non- Veterans	Women	Totals
Summer 1945	86	245	251	582
Summer 1946	1713	172	349	2234
Autumn 1945	339	849	1247	2435
Autumn 1946	3505	420	1208	5133
Winter 1946	1678	619	1076	3373
Winter 1947	3711	456	1004	5157
Spring 1946..	1907	484	1064	3455

A study of the foregoing table will disclose some very significant facts. For example, the Summer Quarter enrollment for 1946 was almost four times as great as that of 1945. The number of students enrolled in the Summer Quarter of 1946 was approximately 500 in excess of the Autumn Quarter enrollment in the year preceding the declaration of World War II. The enrollment of the Autumn, Winter and Spring Quarters of 1946-47 was approximately three times that of the corresponding pre-war period.

It should also be noted that the great increase in the size of the student body in the year 1946-47, came about through an increase in the enrollment of male students, principally veterans. The numbers of women in the student body remained fairly constant throughout the year. It is, however, significant that the enrollment of women was substantially double that of the pre-war years. This increase in the enrollment of women doubtless derives in part from the con-

tinued attractiveness of the recently adopted curricula in Retailing and Secretarial studies.

Since it was impossible to expand faculty personnel in proportion to the growth of the student body, it became necessary to increase very substantially the average number of students per section and to offer a number of very large sections. It should be noted, however, that developments in the field of visual education have offset some of the limitations inherent in large sections. We plan, however, to substitute somewhat smaller sections at the earliest possible moment.

The following table shows the very rapid increase in the number of degrees conferred by the College.

COMPARATIVE DATA ON NUMBER OF GRADUATES
FOR THE YEARS 1945-46 AND 1946-47

Quarter	Men	Women	Total
Summer 1945.....	11	23	34
Summer 1946.....	39	30	69
Autumn 1945.....	12	20	32
Autumn 1946.....	71	22	93
Winter 1946.....	17	20	37
Winter 1947.....	73	21	94
Spring 1946.....	52	74	126
Spring 1947.....	186	102	288

Attention is directed in the foregoing table to the very rapid increase in the number of degrees granted, a phenomenon which will continue for the quarters immediately ahead and which may be reflected in some decrease in the size of the student body within a comparatively few quarters. If this occurs, the effect will be to re-establish a more constructive student faculty ratio.

Administration.—The rapid increase in student enrollment multiplied college administrative and clerical duties and responsibilities and it became necessary to add somewhat to these staffs and to effect changes in our procedures. One of the more important of these staff additions was the creation of the new position of Assistant Dean and the appointment of Professor J. Wayne Ley,

who had been Acting Secretary of the College, to this new post.

Armand Stalnaker was appointed to the Directorship of the College Student Placement Office. Mr. Stalnaker also holds an assistant-professorship in the Department of Business Organization.

Mrs. Nell Gainer was appointed Assistant Secretary of the College, with major responsibilities in College Office Management and student scheduling.

Mrs. Katherine Porter Allen was appointed to the newly created position of Assistant to the Junior Dean. She also serves as advisor to the large number of enrollees in the Retail curriculum for women.

Department of Accounting.—The staff of this department, as in preceding years, has continued to be honored by election to important offices in Accounting and other professional organizations. The Chairman, Professor Hermann C. Miller, served as President of the American Accounting Association and also as a Director of the Columbus Chapter of the National Association of Cost Accountants. He was also honored by appointment to the Committee on Testing and Selection of Personnel of The American Institute of Accountants.

Professor W. E. Dickerson was elected to membership in the Grand Council of Beta Alpha Psi, the National Accounting Fraternity. Professor R. S. Willcox served as Secretary-Treasurer of the Ohio Society of Certified Public Accountants and also as a National Director of the National Association of Cost Accountants. Professor W. B. Jencks assumed the editorship of the professional journal known as The Ohio Certified Public Accountant. Professor James R. McCoy was elected Secretary-Treasurer of the Faculty Club. He also serves as Finance Officer of the University Post of the American Legion. An additional honor was Professor McCoy's appointment to the Committee of the American Accounting Association on Revision of the Statement of Accounting Principles

Underlying Corporate Financial Reports. Professor Walter C. Burnham has rendered important public service as President of the School Board of his home community, Pickerington, Ohio.

Members of the staff have continued to make important additions to the literature of Accounting. Heavy teaching responsibilities, however, have been a negative influence on scholastic output. Professor J. B. Heckert's book on "Business Budgeting and Control" is one of the more noteworthy of the year's contributions.

Throughout the year, the Department carried forward significant experiments in the use of visual aids in the teaching of Accounting. The results of these experiments will be presented to the American Accounting Association at its Annual Meeting to be held in New York in September, 1947.

Plans for future development lie in the area of graduate work, in the extended use of visual aid materials and in greater use of accounting machine equipment for instructional purposes.

The Department has continued to be handicapped by the lack of suitable special purpose class rooms and by inadequate laboratories and offices and secretarial and stenographic services. Some of these deficiencies will be eliminated by the completion of the addition to Hagerty Hall.

The Department celebrated its twenty-fifth anniversary in connection with the Ninth Annual Institute on Accounting, which was held on the Campus, May 16 and 17, 1947. In accordance with the established custom, the proceedings will be published as an important addition to the literature of Accounting.

Bureau of Business Research—During the year ending June 30, 1947, the Bureau of Business Research carried on its regular functions:

1. Collecting, analyzing and publishing data on Ohio population, industry, commerce and finance.
2. Rendering a general economic information

service to Ohio business trade associations, government units, and business firms.

3. Providing facilities for conduct of graduate and faculty research in commerce fields.
4. Serving the College Departments in organizing and promoting business conferences and in publishing Commerce Conference Proceedings.
5. Serving the college in the preparation of educational and promotional materials.

All of these regular functions have been expanded during the current year due to the increase in funds made available in the last biennial budget. The comprehensive program of research and publication in aid to small business in Ohio, begun in the first year of the biennium, was continued and accelerated during the past year. A new series of publications to be known as "Ohio Small Business Handbooks" was inaugurated, and the first of the series, "Information Sources for Small Business," has been published. Manuscripts for two other handbooks of the series are now in press, namely: "Operating and Tax Reports Required of Ohio Manufacturing and Wholesaling," and "Operating a Retail or Service Business in Ohio According to Law," both by Mr. James C. Yocum, of the Bureau Staff, who continued to serve as consultant to the Ohio Small Business Commission throughout the year.

During the year, several new service researches to business were undertaken under the supervision of members of the Business Organization Department of the College in cooperation with National Trade Organizations. Two studies, now in manuscript, were made during the year under the supervision of Professor Herman C. Nolan of the Business Organization Department in cooperation with the National Wholesale Druggist Association. They were:

An Analysis of Warehouse Operations of Service Wholesale Druggists, by Albert B. Fisher, Jr.

The Use of Job Analysis and Time and Duty Study As Bases for More Effective Selection and Training of Wholesale Drug Salesmen, by James H. Davis.

Also, under the supervision of Professor Nolan, and in cooperation with the Na-

tional Pharmaceutical Association, the Bureau participated in the National Survey of prescription content to be used in evaluating and revising pharmaceutical educational curricula.

A study of Factors Affecting Sales Success in Retail Selling was begun under the supervision of Professor H. H. Maynard of the Business Organization Department in cooperation with a large department store.

During the year, Mr. Arnold and Mr. Yocum, of the Bureau staff, have made substantial progress toward completing indexes of retail sales in Ohio, by lines for each of the 8 major cities, from 1935 to date. This study will be ready for publication early next year.

Books and Monographs Published

After Unemployment Benefits, What? by Sam Arnold and Rose Papier.

Information Sources for Small Business, by James C. Yocum, assisted by Emma Ferin.

Graphic Presentation of Business Data, by Edwin W. Smart and Sam Arnold.

Columbus Census Tract Street Directory, by Merriss Cornell.

Municipal Provision of Parking Facilities—State Laws and City Projects, by James C. Yocum, assisted by Joan P. Whipple.

Business Views on the Parking Problem in Ohio Cities, by James C. Yocum.

Publication in Press, End of Year

Ohio Business Data, 1926-1945 (Basebook for the Bulletin of Business Research), by Sam Arnold and James C. Yocum.

Trend in Employment and Employee Earnings, by Viva Boothe and Sam Arnold.

Public Finance of Air Transportation, by Richard W. Lindholm.

Operating and Tax Reports Required of Ohio Manufacturing and Wholesaling Businesses, by James C. Yocum, assisted by Joan P. Whipple.

Operating a Retail or Service Business in Ohio According to Law, by James C. Yocum, assisted by Joan P. Whipple.

During the year the Bureau Staff assisted in the conduct of six regular business conferences and edited and published six proceedings in the regular Commerce Conference series. The Bureau also assisted in editing four issues of "The Ohio Certified Public Accountant" in cooperation with the Accounting

Department of the College and The Ohio Society of Certified Public Accountants.

Department of Business Organization.

—The year was marked by a number of significant changes in Faculty personnel. Professor Orin E. Burley resigned to join the staff of the University of Pennsylvania. The Department also lost the services of Assistant Professor Milo Kimball, who resigned to accept a position in Rhode Island State College.

Two important additions were made to the marketing staff. Dr. Robert Bartels was appointed to an Associate Professorship and Dr. Paul L. Brown returned to the University as Assistant Professor in Business Organization.

The Department's research and publication program was somewhat curtailed by the heavy teaching burdens imposed on the staff by rapidly mounting student enrollments. Among the more noteworthy of the staff's publications was the fourth edition of the widely used text, "Principles of Marketing," authored by Professors H. H. Maynard and T. N. Beckman.

Throughout the year the Department continued to serve the business men of the State by its sponsorship of a considerable number of Conferences, or one or two day institutes on various phases of business enterprise.

The Department plans for future development include the addition to the staff of a number of outstanding scholars. For example, the Department has long felt the need for outstanding course work in the field of Business Policy. Effective work in this area would seem to require the addition to the staff of an outstanding man of rich experience and high scholarship. Other principal staff requirements lies in the fields of Market Research, Real Estate, Insurance and Business Law.

The Department has continued to experiment with certain types of work experience, field work or business internships. These field work opportunities have, in the past, been extended to cer-

tain selected students in Air Transportation and in Industrial Management. A quarter's field work has been required of all girls majoring in Retail Merchandising. The Department now plans to gradually extend such field work or internship opportunities to students majoring in other fields.

Faculty honors include the election of the Chairman, Professor H. H. Maynard, to a Directorship of the American Marketing Association.

Department of Economics.—The year 1946-47 brought numerous changes in the Department of Economics in respect to the composition of its faculty, the nature of its educational programs and the significance of its public relations. The number of persons of all ranks on the staff increased by approximately 80 per cent over the previous year and the number of student registrations increased by 105 per cent.

Numerous faculty changes occurred during the year. They included one retirement, 9 resignations and 18 new appointments, above the rank of Assistant.

Professor A. B. Wolfe, a former chairman of the department and National President of The American Economic Association in 1943, retired as Professor Emeritus but was called back to active duty on a part-time basis.

Four professors on leave of absence resigned to remain in United States Government service. Professor R. Henry Rowntree became Executive Director of the Philippine War Damage Commission with headquarters in Manila. Professor Edward C. Welsh was made Chief of the Anti-Trust Division under General MacArthur in Japan. Professor Walter Egle went to the University of Cincinnati as Professor of Economics.

Professor Ralph Dewey of Iowa State College and formerly Head of the Transportation Section of the U. S. Bureau of Agricultural Economics, was appointed professor of economics, part-time in conjunction with his part-time appointment

as Assistant Dean of the Graduate School.

The following persons were appointed to Assistant Professorships: James D. Calderwood, Richard W. Lindholm, Arthur P. Becker, Alvin E. Coons and Meno Lovenstein.

A number of scientific and popular articles were written by members of the staff during the year, among which were the following:

Professor H. Gordon Hayes: "The Narrowing Gap between the Rich and Poor," Harper's Magazine, July, 1947.

Professor Thomas L. Kibler: "The Silver Question," "World Politics" and "The Pearl Harbour Congressional Investigation," Americana Annual, 1947.

Professor Richard D. Lindholm: "Germany's World War II Debt," The Bulletin of the National Tax Association, May, 1946.

Professor Frances Quantius: "The Insurance of Bank Loans and Its Implications," Journal of Business, University of Chicago, 1946.

Mr. Walter G. O'Donnell: "The Educational Crisis in America," Modern Education, London.

During the year the department developed a "Curriculum in Labor Economics." This curriculum is to provide a basic understanding of labor economics that will enable students to prepare for positions with labor unions, government agencies or industry. For students desiring to do graduate study and research, this curriculum will provide a sound foundation for future work. The increasing interest in this field and the growing demand for trained personnel will be served by this curriculum.

A considerable amount of effort during 1946-47 was devoted to the department's radio program over WOSU which has been expanded considerably under the direction of Instructor Ann Pike. This program consists of two parts: "Economically Speaking," a Sunday afternoon broadcast on economic problems by a panel of three professors

in the department, with the assistance of Miss Pike; "Everyday Economics," a fifteen minute discussion of current economic issues, three times a week, by members of the department. During the period covered by this report a total of thirty-two different persons participated in these programs—twenty-one from the Department of Economics and eleven "guests," including persons from other departments and some from off campus.

Among the plans for future development, the following may be emphasized in this report:

1. Greater Emphasis Upon Research: For the first time in its history the Department of Economics has been the recipient of two research grants from the Research Foundation, one in Public Finance and one in Labor. It is hoped that this is only the beginning. In conjunction with the Bureau of Business Research and The Personnel Board the department is making its plans for future research.
2. Development of Curricula in the College of Commerce and Administration: The Department of Economics now has two curricula—"Economic Analysis" and "Labor Economics." Since these curricula are both new much attention will need to be given to them, particularly in respect to advising students.
3. Better Organization for Graduate Work: With an increasing number of graduate students and a growing demand for different types of graduate programs, the Department of Economics is giving careful study to the need for new graduate courses and curricula; to better methods of guiding graduate students; to better procedures for checking the progress of graduate students. Much of this work is being carried on through the department's Committee on Graduate Work.
4. New Techniques for Teaching Beginning Courses: Since nearly 70 per cent of the instruction offered by the Department of Economics is in elementary courses, continued attention has been given to methods of presenting materials, types of examinations, organization of instruction, and the training of inexperienced teachers.
5. Further Extension of Radio Programs: The Department of Economics plans to extend its radio activities on the theory that radio education is coming to be increasingly important. During 1946-47 a program has been developed which will permit the department to participate in Ohio's School of The Air.

The problem of securing competent teachers continued to present difficulties. This problem is, of course, complicated by comparative salary scales, involving competing universities, governmental agencies and business. The department wishes to record the continued handicap which it suffers because of limited secretarial and stenographic services.

Department of Geography.—One of the more difficult of the problems confronting this department throughout the year was its inability to increase its teaching staff in proper proportion to the rapid increase in student members. As a result, it became necessary to teach a number of courses in large lecture sections of 200 to 350 students.

Staff developments included the appointments of Dr. John R. Randall as Associate Professor, and of Messrs. Oliver W. Beimfohr and Arthur E. Karinen as instructors. The resignation of Professor Shannon McCune on December 31, 1946, was a serious loss to the department.

Faculty honors include the re-election of Professor Guy-Harold Smith as Treasurer of the Association of American Geographers. Professor John R. Randall was named as Associate Editor of the *Middle East Journal*. Professor Eugene Van Cleef was asked to serve as a member of the Educational Committee of the National Foreign Trade Council.

During the interval between Christmas and New Years, the department entertained the Association of American Geographers, the National Council of Geography Teachers, and the American Society for Professional Geographers at their annual meetings held on the campus. Both the number in attendance and the quality of the papers presented reflect the postwar interest in geography and favorable location of Columbus in relation to the professional geographers of America.

Staff publications include Professor Roderick Peattie's book entitled "Strug-

gle on the Veldt." Other staff members contributed papers and reviews to various geographical publications.

Principal educational developments lie in the addition of a number of new graduate courses and in significant additions to the department's map and library resources.

Department of Sociology.—A major addition to the staff of the Department resulted from the appointment of Dr. Brewton Berry to a Professorship. Immediately before coming to Ohio State, Dr. Berry was chairman of the Department of Sociology at Rhode Island State College. His fields of special interest are Race Relations, Urban Sociology and American Sociological Theory.

Members of the staff have been honored by election and appointment to important professional positions. Professor Perry P. Denune was elected President of the Ohio Valley Sociological Society. Professor Brewton Berry has served on the Membership Committee of the American Sociological Society. Professor John F. Cuber is a member of the Advisory Council of the National Council on Family Relations and was elected Editor of the *Ohio Valley Sociologist*.

Principal staff publications are as follows:

1. PROFESSOR JOHN F. CUBER
Sociology: A Synopsis of Principles, D. Appleton Century Co., 1497, 580 pp.
"Marriage, Home and the Family" in Roucek and others, *Social Control*, Van Nostrand Company, 1947.
2. PROFESSOR C. C. NORTH
"Social Classes" in Roucek and others, *Social Control*, Van Nostrand Company, 1947.
3. PROFESSOR BREWTON BERRY
Review of L. W. Simmons, "Role of the Aged in Primitive Society (Yale, 1945), in *American Sociological Review*, 11:6, Dec., 1946.
Review of Gordon MacGregor, "Warriors Without Weapons" (Chicago, 1946) in *Rural Sociology*, 11:4, December, 1946.
Review of Franz Boaz, "Race and Democratic Society" (August, 1945) in *American Sociological Review*, 12:2, April, 1947.
4. JOHN W. BENNETT
"An Interpretation of the Scope and Implications of Social Scientific Research in Human Subsistence," in *American Anthropologist*, Vol. 48, No. 4, 1946.
"The Interpretation of Pueblo Culture: A Question of Values," *Southwestern Journal of Anthropology*, Vol. 2, No. 4, 1946.
"Empiricist and Experimental Trends in Eastern Archeology," *American Antiquity*, Vol. 11, No. 3, 1946.
Several Book reviews in *Anthropological and Sociological Journals*.
5. FLORENCE G. ROBBINS
Accepted for publication in October, 1947, issue of *Childhood Education*, "Teacher Understandings in Human Relations."
Review of T. J. Reid, "It Happened in Taos" in *Annals of American Academy of Science*, June, 1947.
6. KURT H. WOLFF
"Notes Toward a Social-Cultural Interpretation of American Sociology," *American Sociological Review*, 11:545-553, October, 1946.
7. MELVIN SEEMAN
"Skin Color Value in Three All-Negro School Classes," *American Sociological Review*, 11:315-321, June, 1946.
"A Situational Approach to Intra-group Negro Attitudes," *Sociometry*, August-September, 1946.
"An Evaluation of Current Approaches to Personality Differences in Folk and Urban Societies," *Social Forces*, 25:160-165, December, 1946.
8. ROBERT A. HARPER
"Is Conformity a General or a Specific Behavior Trait?" *American Sociological Review*, Volume XII, No. 1, February, 1947, pp. 81-86.
"The Present Status of Questionnaire-Derived Opinion Data," *Social Forces*, Volume 25, No. 3, March, 1947, pp. 294-297.
9. STUART ADAMS
"Trends in Age at Marriage" in *Ohio Valley Sociologist*, February, 1947.

Plans for future development include an expansion in the facilities for graduate work and research. It is the Department's hope that with the completion of Hagerty Hall, space will be assigned for a Sociology research bureau. With from 25 to 35 graduate majors in residence during the past year, there is obviously great need for the creation of adequate program and facilities. With these basic needs met, there is every reason to expect a doubling of the graduate enrollment in the years immediately ahead.

School of Social Administration.—The

year brought a number of staff changes to the School of Social Administration. Dr. James E. Hagerty, Professor Emeritus and first Dean of the College of Commerce and Administration and long a distinguished Professor of Social Administration, died in November, 1946. The School sustained another serious loss in the untimely death of Professor John A. Reimers.

Special staff honors included the election of Professor Everett C. Shimp to the Vice-Presidency of the Ohio Welfare Conference. The Director, Professor C. C. Stillman, was signally honored for his noteworthy contributions as a teacher and counsellor in the field of Community Organization.

Significant educational developments of the past year include two institutes for the training of rehabilitation counselors, a "School Social Work" curriculum developed in cooperation with the College of Education and continued development toward a medical social work curriculum.

The School wishes to direct attention to the need for the continuation of field consultant service to Ohio cities and communities.

It is also the judgment of the staff that emphasis must be placed upon work shops and institutes related to current needs in social work. This has special reference to the public welfare program of the state.

* * *

College of Dentistry

ALONG with the other Colleges of the University, the College of Dentistry has expanded its facilities to meet the greatly increased postwar enrollment. In previous years it accepted a maximum of 60 students in each freshman class; this year 76 were accepted. All of these were Ohio residents and all but two were veterans. The scholastic rating of these students was unusually high and they have finished their first year in den-

tistry with grades far above the average.

During the year July 1, 1946, to June 30, 1947, 50 students were graduated with the degree of Doctor of Dental Surgery, and 15 women received certificates as Graduate Dental Hygienists. Two hundred and nine students were enrolled in Dentistry and 51 women in the Dental Hygiene Curriculum. Four students were enrolled in the Graduate School, working toward Master degrees.

Three new faculty members have been added to the staff: Dr. John R. Wilson, Dr. L. A. Larrimer and Dr. C. P. Thom. In addition to these, Dr. D. C. Miller has been appointed to the staff in the post-graduate course in Orthodontia.

During this year, \$3,000,000 was added to the building fund for the new Medical Center, making a total of \$8,000,000 for this project. The realization of our hopes for a new dental building now seem to be a certainty.

A two year course for the training of dental laboratory technicians was approved by the Board of Trustees. This course is for men only and leads to a Certificate of Graduate Dental Laboratory Technician. The first class in this curriculum will start with the autumn quarter 1947. The College of Dentistry now offers two courses in the training of auxiliary groups to serve the dental profession: Dental Hygiene and Dental Technology.

Post-graduate courses have again proved to be very popular. Two new courses were added this year: Anatomy of the Head and Neck and Oral Hygiene for dental hygienists. There were 92 registrations for the courses given during the autumn quarter, 91 during the winter quarter and 71 in the spring. In addition to the above, five dentists were enrolled in a special two years post-graduate course in Orthodontia. The post-graduate program offered by the College is becoming more and more an important function of our school. Dentists are enrolled, not only from Ohio but from nearly every state in the Union.

In addition to their teaching duties, the members of the faculty are making a great contribution to dental education by taking part in dental society programs throughout the country.

The College has also been active in research. Two Research Foundation projects were carried out during the 1946-1947 academic year. Drs. Kitchin and Robinson investigated the relative effects of round-end and cut-end toothbrush bristles on the gums. No significant difference was noted with the brushes used. Drs. Arnim, Kitchin and Robinson, with consultation from Drs. Birkeland and Dodd of Bacteriology, studied new approaches to the problem of tooth decay and developed a proposed plan for investigation. The Proctor and Gamble Company has agreed to give \$12,000 per year to this project.

Miss Permar and Drs. Kitchin and Robinson have continued the study of the reliability of salivary lactobacillus counts, a standard procedure in caries diagnosis.

Dr. Kitchin has continued investigation of the effect of pregnancy and lactation on the teeth and bones.

Dr. Robinson has continued studies and classification of oral tumors and cysts, and of the effects of ageing on the teeth. He has also studied the citrate content of saliva as a possible clue to dental erosion.

Possibly editing the *Journal of Dental Research* should be considered as a research activity. Dr. Robinson is Editor, Drs. Kitchin and J. B. Brown are Assistants to the Editor, and Dr. Arnim is Circulation Manager. Dr. Kitchin is serving as Chairman of the Dental Study Section of the United States Public Health Service.

Research publications appearing this year include: *Toothbrushing Habits of 405 Persons* (Robinson), J.A.D.A. 33:1112, 1946.

A Clinic on the Differential Diagnosis of Oral Lesions (Robinson), American

Journal of Orth. and Oral Surg., Vol. 32, No. 12, pp. 720-762, December 1946.

Variations in Counts of Lactobacilli Made from Single Specimens of Saliva (Dorothy Permar, Paul C. Kitchin and H. B. G. Robinson), *Journal of Dental Research*, Vol. 25, No. 6, December 1946.

Some Clinical Aspects of Intraoral Age Changes (Robinson), *Ceriatrics*, January-February 1947, Vol. 2, No. 1.

* * *

College of Education

REPORTS for the year 1946-1947 from every one of the departments, schools, and bureaus within the College of Education tell a single story: expansion of the demands for instructional and other services at a very rapid rate, and expansion of staff and facilities at a much slower rate. The discrepancy between the legitimate demands upon the College and its resources for meeting them was marked in every aspect of its research, service, advisory, and instructional programs. The three most acute problems were (1) inadequate space and physical equipment; (2) a disproportionately high increase in enrollment at the two extremes of the instructional program, where the need for individual attention makes the heaviest demand upon staff time—graduate students and entering freshmen; (3) a growing demand for special services to local communities, to the state, and to the nation. The sections of this report dealing with the separate departments, schools, and bureaus show that these problems were met by a variety of makeshift and for the most part unsatisfactory expedients. The increased budget for 1947-1948 should alleviate some of the worst situations and enable the College as a whole to do a considerably better job.

Enrollment Trends.—The steady rise in enrollment of the two previous years continued during the year 1946-1947. Registrations in the College totaled

3,962, an increase of nearly 60 per cent over the peak enrollment of the preceding year. This figure gives no fair picture of the instructional load carried by schools and departments of the College, since it does not include the 1,224 graduate students in education, psychology, music, fine arts, and physical education. Graduate and undergraduate students for whose guidance and instruction the College took major responsibility in 1946-1947 totaled 5,186.

About four-fifths of those enrolled in the College were preparing to teach; the remainder sought degrees in such fields as fine arts, music, and occupational therapy. Among the 407 students graduated by the College, the proportion of prospective teachers was even higher. There is evidence that the task of alleviating Ohio's severe teacher shortage is being accomplished more rapidly than anyone had dared to hope, and that in a few areas (notably history and the social studies) the next year or two may see the problem of teacher shortage converted into one of over-supply. The College, through its advisory program, is continuing its efforts to interest appropriate students in those teaching fields where shortages are still acute.

Department of Education.—The end of the war brought an influx of graduate students whose work had been interrupted for periods ranging from one to five years. In the summer of 1946, 91 persons completed their work for the Master's degree as compared with 48 in 1945. Indications at the beginning of the 1947 summer quarter were that more than 100 students would complete Master's degrees and 10 would complete Ph.D. degrees. Undergraduate enrollments increased in industrial arts, elementary education, and the teaching fields of science, mathematics, and social studies. There was a substantial increase in the number of student teachers in elementary education, social studies, mathematics, and science.

In planning to meet more effectively

the needs of the schools of the state, the Department has expanded its program and its staff. Twelve new courses have been approved strengthening the Department's offerings in elementary education, philosophy, secondary education, and the teaching fields of mathematics, science, English, and social studies. In response to the request of the State Department of Education, the Department is planning to enter the fields of trades and industries education and distributive education.

For several years, the Department has offered a minor in library science. The new regulations of the North Central Association of Colleges and Secondary Schools requiring all North Central schools to have trained librarians beginning with the school year 1952-1953 demand the expansion of the present minor to a major.

Throughout the year, the Department in its regular meetings continued its discussion of general education. The results of a survey of general education in the Department's courses will serve as an important basis for the reconstruction of our offerings to the end that teachers and administrators may be better prepared for dealing with the responsibilities of education in the post-war world.

Special features of the 1946 summer quarter were a refresher course for graduate students who had spent one or more years in the armed services, an intercultural workshop, a mathematics workshop, and a reading workshop.

Department of Psychology.—Enrollment in the Department of Psychology continued to increase at about the same rate as during the previous year. Enrollment for the year in all courses in the Department totaled 11,959. The greatest increase was in graduate courses, where the number of students has more than trebled since 1944-1945. For the Department as a whole, enrollment has more than doubled within this same period.

In the service courses at the 400 level, enrollment for the year totaled 6,473. In addition, the Department staffed several sections of education survey with teachers of the beginning psychology courses, so that some freshmen students in the College of Education could have continuous contact with the same instructor throughout the first year.

The great increase in enrollment in the elementary service courses was met by grouping all students in beginning psychology in a single large lecture section which filled an auditorium. This expedient is obviously undesirable, but the demand for trained psychologists is at present so great that it is impossible to bid successfully for the services of competent junior staff members in sufficient numbers to permit a more effective student-teacher ratio. The Department fully recognizes the importance of changing this situation as quickly as conditions will permit.

The Department has developed a required curriculum for Arts College students majoring in psychology. It has also developed an elementary psychology course specifically designed as an alternative in the required biological science sequence of the Arts College.

The demand for clinical psychologists is tremendous—the Veterans Administration alone wants six hundred, and there are not that many adequately trained clinical psychologists in the country. The Department has had ten trainees in clinical psychology under the Veterans Administration program and plans to take about ten more next year, along with several others under a program sponsored by the U. S. Public Health Service.

The case load in the Psychological Clinic, the Student Consultation Service, and the Remedial Aids Center has shown some increase. Many veterans come to these agencies with family problems and problems of mental adjustment. The agencies also serve the program of the Department by furnishing (along with

the Bureau of Juvenile Research, the Occupational Opportunities Service, the courts and the schools) internship facilities for the many graduate students who are coming to the Department for training as vocational counselors.

Staff changes at the senior level during the year included the appointment of Professors George A. Kelly and Victor C. Raimy in the Clinic, Professor Delos O. Wickens in the elementary area, and Professor Arthur W. Melton in general psychology.

Aside from the usual research conducted by members of the instructional staff and by graduate students working on theses, several major projects deserve special mention. The research on educational acceleration has been virtually completed. Several publications growing out of this study have attracted national attention. A project on teaching aids is in progress for the United States Navy. A confidential research project in the field of radar is being conducted for military authorities. In the Civilian Aviation Program sponsored by the National Research Council an inquiry has been completed into the question of whether persons with visual defects can learn to fly satisfactorily and a project is now under way having to do with stall indicators. Plans have been made for a comprehensive research project sponsored by the U. S. Public Health Service and involving several other institutions which looks toward the development of more effective psychometric techniques.

School of Fine and Applied Arts.—The enrollment of 1945-1946, which seemed the limit of the School's capacities, was exceeded by 1,489 during the year 1946-1947. This increased load brought many problems in maintaining the standards of instruction and in utilizing scarce space and equipment.

Ten new teachers in various ranks were employed (one new teacher for each 150 new students), and Fine Arts classes were scattered over six different

buildings. In spite of all that could be done, instruction suffered from overcrowded classrooms in the undergraduate program and from grossly inadequate facilities for graduate students. The inability of the publishing houses to meet the demands for standard textbooks led to another heavy draft upon teacher time; instructors had to prepare quantities of mimeographed notes and blackboard material related to the lectures.

The service work for other colleges very naturally rose along with the general increase in university registration. There were 2,608 enrollments of students not majoring in Fine Arts. These came from seven colleges—Agriculture, Arts and Sciences, Commerce and Administration, Dentistry, Engineering, Medicine, and Education. This is an encouraging indication that the School is functioning as a general cultural agent and not exclusively as a training school for artists.

Professor Arthur E. Baggs died on February 15. This was a serious loss not only to the ceramic art area of this School but to the national ceramic field as well. Professor Baggs developed an outstanding program in ceramics and maintained contacts with the industry. It was largely through his influence that the ceramic industries were led to make possible the inauguration of the Ceramic Pilot Plant in Hayes Hall. His plans for this project are well known to his colleagues, who propose to carry them through to fruition as a fitting memorial to a great man.

Two staff members resigned at the beginning of the year 1946-1947. Robert Coffin became Assistant Dean of the Art Academy of Cincinnati, and Frank Roos, Jr., became head of the Department of Fine Arts at the University of Illinois. Professor Frank Seiberling, Jr., was secured to replace Professor Roos.

The approaching retirement of Professor James R. Hopkins, Director of the School since its founding, necessitated

the selection of a successor. The staff carried on an extended inquiry into the nature of the educational responsibility of Fine Arts in the contemporary world and the kind of leadership needed for the developing program. The School cooperated with Dean Cottrell in recommending the selection of Professor Frank Seiberling, Jr., as the new Director.

School of Music.—The year 1946-1947 showed the largest increase in enrollment since the founding of the School of Music. Enrollment rose from 855 in the previous year to 1311, an increase of 53.3 per cent. Three full-time teachers, Professor Wilbur Held, Professor Norman Staiger, and Professor Antonio Lora, and eight part-time teachers were added to the staff, and the teaching load of each faculty member was increased as a temporary solution to the problem of handling the additional enrollment.

Entrance examination requirements were revised, and a new procedure for handling the large number of incoming freshmen was developed. Mrs. Miriam Mooney was transferred from piano instruction to the newly created office of freshman coordinator.

The School of Music, as a service to the campus and to the state, presented the University Chorus, the Symphonic Choir, the Symphony Orchestra, the Symphonic Band, the Women's Glee Club, and the Men's Glee Club in a combined total of 22 concerts. The Marching Band made eight appearances. In addition, 44 solo and small ensemble concerts were given by students, faculty, and guest artists.

The School presented 212 broadcasts over Station WOSU. These included programs for the School of the Air and the Junior College of the Air.

The Symphonic Band, Symphonic Orchestra, Symphony Choir, Men's Glee Club and Women's Glee Club each made a spring tour, giving a total of 23 programs and playing to approximately 12,000 people off campus.

The School of Music was host to the

State Solo and Ensemble Festival for the 14th time since 1930. About 800 students took part, and there were 1,500 visitors. The Institute on Church Music and Worship was re-established after a lapse during the war years. Ninety-six persons from twenty-four states attended. The School proposes to parallel the Institute on Church Music and Worship with an Institute on Instrumental Music, so that graduates and graduate students may be served in this important area of music education.

A new course, Organ Literature, was approved by the Graduate Council. The School also proposed a major in Theory at the undergraduate level, and a major in Composition at the graduate level. These proposals are now before the appropriate University bodies for consideration. Three new courses in Radio Music are also before the Council on Instruction, but these are being held until a University policy in regard to Radio is established.

Bureau of Educational Research.—The year 1946-1947 brought several major staff changes. Professor Ross L. Mooney, who served as Acting Dean of the College of Education during 1945-1946, returned to his position as head of the Personnel Division. Professor Louis E. Rath, head of the Evaluation Division, resigned to accept the directorship of a newly created Bureau of Research and Evaluation at New York University. Professor John H. Herrick, formerly Assistant to the Superintendent of Schools, Cincinnati, Ohio, was added to the staff.

The Appointments Division reported that it had openings for all graduates of the College of Education who wanted to teach. The number of calls for applicants received by the Division during the first six months of 1947 was slightly in excess of the total number received during the entire year of 1946. Shortages were particularly acute in the elementary field.

The Curriculum Division continued to give its major attention to studies of

readability and applied citizenship. It also carried on a Visual Aids Institute in cooperation with the Teaching Aids Laboratory, which was attended by 105 representatives from 22 school systems. Institutes in other fields are being planned for the coming year.

The Editorial Division, in addition to its regular work of publishing the *Journal of Higher Education* and the *Educational Research Bulletin*, edited and published a booklet entitled, *Hand-and-Rod Puppets*, by Marjorie Batchelder and Vivian Michael, and edited an experimental edition of the "Col-Ed," student paper in the College. The head of the Division continued to serve as educational consultant of the Conservation Education Laboratory.

The Evaluation Division continued its activities in exploring problems in human relations and developing better ways of evaluating teaching. The Division also assisted in a number of school surveys.

The Personnel Division devoted most of its time to studies of problems in the administration of the College and in organizing the newly created College Committee on Research and Service. Some time was given to further developments of *The Problem Check-List*.

The Survey Division completed surveys concerned primarily with school buildings in twenty-one Ohio School Districts. Comprehensive consultant service in planning new school buildings was offered by this Division to Ohio School Districts.

The work of both the Reference Division and the Teaching Aids Laboratory increased sharply. The University Recording Studio, operated by the Teaching Aids Laboratory, did 1385 hours of actual recording during the year. On January 1, a Chart and Graph Service was set up in the Teaching Aids Laboratory. During the ensuing six months, 524 pieces of art work were produced for 37 departments.

Studies of educational acceleration were continued under Professor S. L.

Pressey, and the Director of the Bureau continued to service as Chairman of the State Commission for the New Residential Schools for the Blind and the Deaf.

Bureau of Special and Adult Education.—During the year 1946-1947, the Bureau of Special and Adult Education, in cooperation with other departments of the College and University, continued to strengthen the program for the training of special education personnel for child study, for teaching slow-learning classes, for speech correction, and for teaching the hard of hearing. Plans were developed for training teachers of the deaf and visiting teachers (school social workers). The Bureau also continued to expand its service to public schools. It offered consultant service in organizing child study programs and special classes, and in helping schools to develop in-service training for teachers and other special education personnel.

The Special Education Workshop held during the last week in June enrolled approximately 150 special education personnel from all parts of the state. A new staff position, financed jointly by the Bureau and the State Department of Education, was created to enable the Bureau to extend its field services.

The Bureau continued its research project in child study. It also carried on a survey of speech and hearing defects of the children in the Delaware City and County schools. The Bureau also participated in a research project on vision carried on at the University School. Members of the Bureau staff assisted in the Mental Hygiene Research program in Miami County.

The Bureau staff continued to provide speech examinations for all new and transfer students in the College of Education, and to handle referrals for speech correction. This program involved interviews with 2,387 students.

The Bureau continued to serve as the editorial headquarters for the "American Journal of Mental Deficiency." Plans are under way to change the title of this

publication to the "International Journal of Mental Deficiency."

The Bureau has continued its assistance to schools and community agencies in setting up adult evening classes for veterans and other adults, in developing leadership training programs in parent education, and in arranging for forums and discussion groups.

University School.—On the basis of a number of years of experimentation with a core curriculum in grades seven, eight, and nine and two years of study of "common learnings" appropriate for pupils of the senior high school, the University School staff has built a new core curriculum for its secondary school. Similar in design to the program described by the Educational Policies Commission in its report "Education For All American Youth," this core program consists of required experiences in problems of living for one-third to one-half of the school day, with the remainder devoted to a study of appropriate special electives.

This program has attracted wide attention. Educators have come from all parts of this country and from foreign lands to study it in action. Some schools are sending portions of their staff to spend as long as two weeks in the University School studying its organization and curriculum planning. The year 1946-1947 saw a considerable growth in the extent of services rendered by the University School to other schools. Staff members were called upon to assist in workshops in this and other states, and extensive consultant service was rendered to schools throughout the State.

The School has made definite strides forward in its health service and health education program. A number of research projects have grown out of the work of the staff in the field. Much of this work has been in cooperation with other departments of the College and other colleges of the University. A Vision Testing Program for Ohio's schools is being recommended as a result of

cooperative research between the College of Medicine, the Department of Optometry of the College of Arts and Sciences, the Bureau of Special and Adult Education, and the University School.

The "Panel on Democracy," a weekly half-hour broadcast sponsored jointly by the University School and its Parent Council, represents a new approach to the problem of developing common concerns between the home and the school. This project is in the beginning of its third year.

The fourth publication of the University School Series of Adventure in Education, a small illustrated pamphlet called "Creating Friendly Relations," has just been completed and will be off the press soon.

Occupational Therapy.—Ninety-four students were enrolled in the Department of Occupational Therapy during the year 1946-1947, and 21 were graduated. The Department worked closely with the Education Office of the American Occupational Therapy Association on an extensive study program looking toward the establishment of improved standards for clinical training centers and the development of a better registration examination.

Lack of space at the University Hospital forced postponing the establishment of demonstration facilities for occupational therapy on campus until the new Health Center is built. The Department proposes to look elsewhere in Columbus for the development of such a program in the near future.

Physical Education (Women's Division).—Enrollment in the program ranged between 122 and 141 during the year 1946-1947. The demand for teachers of the dance, especially in colleges and universities, led to the establishment of a major in this field. A four-year curriculum for the preparation of teachers of the dance has been developed. The work of staff members on College committees has led into several independent research projects.

Physical Education (Men's Division).

—Enrollment in the program rose to 350, all majors, during the autumn quarter of 1946-1947, and never fell below this figure. Thirty students were graduated from the program. Professor R. C. Larkins, director of the undergraduate program, became Athletic Director-elect during the summer of 1946, and Professor Lewis A. Hess was added to the staff to fill the resulting vacancy. Professors W. P. Cushman, C. G. Hixon, and Messrs. A. Ketzenmeyer, H. Kroeten, and C. Traicoff were also added to the staff of the undergraduate program.

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College of Engineering

WITH the close of the war, college attendance was greatly augmented (a) by the return of former students to classes on all levels, (b) by the transfer of former ASTP trainees with and without college training elsewhere, (c) by veterans without previous college experience, (d) by students directly from the high schools.

While these students came with a variety of training and experience their impact was felt most heavily by the departments teaching freshmen; that is, Chemistry, English, and Mathematics budgeted outside the college and Engineering Drawing within the college. By the middle of 1947, however, the wave had advanced until practically all the departments offering advanced work were seriously affected. The highest Engineering enrollment previously recorded was 2,092 in the Autumn Quarter, 1942. Service requirements caused the total to drop to 332 in the Summer of 1944. By the Autumn of 1946 a new high of 4,396 had been reached.

Fluctuations of this magnitude occurring within this short period of time created three major problems:

1. A shortage of teaching staff.
2. A lack of space
3. A dearth of equipment.

These shortages developed on the campus at the same time they became national, even international, so that the meager supply was eagerly sought for.

The need for personnel has been met reasonably well thus far by the return of staff members holding leaves of absence for military or government service and by our ability to attract certain men of high competence from industry. In the freshman area it was possible to use brilliant advanced students for subaltern duties, but this is an expediency which can be used but sparingly in more advanced areas. The University Administration realized at an early date that these difficulties would develop and took steps resulting in the wise legislative action which made it possible to bring certain men to the faculty from industry.

In meeting the needs for additional space, a less encouraging situation has developed. In anticipation of the large enrollments, the college had made intensive studies of building requirements based on actual and estimated enrollments. Without going into detail the following departments now need additional space: Aeronautical, Architecture, Chemical, Electrical, Engineering Drawing, Industrial and Mechanical Engineering. These are needs which are caused by students now on the campus and not on estimates of future requirements. When the Ceramic, Metallurgy, and Mine Engineering Departments grow to enrollments in line with the national need for trained men in these fields, their present facilities will be wholly inadequate.

The Engineering College has been included in the University Building Program and appropriations for some new space have been made, but this problem will be of first importance for many years to come. In the meantime, temporary facilities have enabled the College to operate under handicaps which are greatly increased in the laboratory areas.

Looking at the equipment picture, it is obvious that the shortcomings here

are of a vital character. Many techniques have been revolutionized during the war and in these areas older apparatus and machines have rapidly become obsolete. Included are the fields of electronics, servo-mechanisms, chemical engineering, and metallurgy. In Aeronautical Engineering the College must start anew and build an adequately equipped laboratory. For many years national shortages in scientific equipment have also accentuated the situation so that an expenditure of from three hundred to five hundred thousand dollars will be necessary in the immediate future to bring the college back to a satisfactory standard.

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College of Law

Faculty.—When the Fall Quarter opened the deanship remained vacant but otherwise the faculty was at its full pre-war strength. Unprecedented enrollment, which necessitated sectionalization of large classes, curricular expansion, particularly in public law areas, and the established seminar program for third-year students, combined to make it evident that an increase in the teaching staff was urgently needed. The Board of Trustees accordingly made provision for two new faculty positions. This action will aid the college greatly in conducting an adequate program of teaching and research. It is anticipated that a further increase in faculty personnel may be necessary in the near future if the work of the school is to be adequate in scope and is to be conducted at a sustained high level of performance.

On June 6, 1947, Jefferson B. Fordham, Professor of Law at Vanderbilt University, was appointed Dean of the College. He assumed his duties July 1, 1947, the day after the period covered by this report came to a close.

Student Body.—Total enrollment jumped from 185 in the Spring Quarter of 1946 to 360 in the Fall Quarter of that year. In the latter quarter there

were 194 beginning law students, 125 in the second year class, 36 seniors and 5 students who were not candidates for degrees. It had become necessary to relax the normal maximum of 150 in the first year class in order to cope with the flood of post-war applicants. There were 253 veterans. They made up 70 per cent of the total. On the other hand, there were only 15 women students in the group. As might be expected, most of the students were Ohioans. The geographical distribution of the remainder was as follows: Louisiana, 1; Michigan, 2; New York, 4; North Carolina, 1; Oklahoma, 1; Pennsylvania, 1; Tennessee, 1; West Virginia, 3. The total number of graduates in 1946-1947, was 39. Of this number 9 graduated in December, 1946, and 30 in June, 1947.

The 1947 Summer Quarter opened in June with 202 students enrolled. That was the heaviest summer session attendance in the history of the College.

It is likely that the enrollment may taper off some after the student back-log built up by the war has been exhausted, but it is expected to remain half again as great as the between-wars figure of 225.

Library.—At the end of the fiscal year the Law Library collection consisted of approximately 53,000 bound volumes and a substantial amount of pamphlets and other unbound material. While this collection can fairly be called a good working library, it is quite inadequate for the program of the college. It measures up not at all favorably with the libraries of comparable law schools. The University of Minnesota Law Library, for example, contains nearly 150,000 volumes. The responsibility of the college for teaching and research in these times cannot be satisfactorily fulfilled without a first-rate research library. Ohio State University is the logical center for work at the graduate level in the State. This is true of the College of Law and the College is keenly interested in developing a graduate program. A conditioning factor in launching a graduate program

is the presence of an adequate research library.

Near the close of the year the Board of Trustees gave clear recognition to the library needs of the college by imposing, effective in the Fall Quarter, 1947, a fee of \$15 per student per quarter, the proceeds of which are to be used for the purchase of new books. The fund so raised will be in addition to the normal allocations for continuations and new books. It is expected that by effective use of the additional funds the work of converting the collection into a fine research library will go forward quite rapidly.

To administer the new library program of the college, it is necessary that a highly competent person be appointed to the position of Law Librarian. Provision was made for this during the year and the position will be filled as soon as an available person with the requisite qualifications can be found. It is necessary that the person selected have both legal and library training as well as superior administrative capacity. Provision was also made during the year for an adequate basic library staff consisting of a reference librarian, a cataloguer and a secretary.

Law Journal.—Preliminary plans were laid during the year for the reactivation of the Law Journal. Publication of the Journal was started in 1935 as a Student Bar Association project. The war decimated both student body and faculty and necessitated the temporary discontinuance of the Journal.

The Journal occupies an important place in the work of the College. Such a publication can serve a very significant function in legal education by providing the most promising students special opportunities for legal research, analysis, and writing, and can, moreover, serve as an organ of expression for legal scholarship in the broadest sense of the term.

Plans for the Journal did not crystallize during the year, but there was a basic understanding that it would be

held to the highest standards in all departments. It was also determined that a member of the faculty should be given the responsibility of guiding the student editors in their work with a view to giving the publication sustained direction.

Legal Aid Clinic.—The Legal Aid Clinic was established in 1935, under the direction of the late Professor Silas Harris. Because of the reduced condition of the College during the war years, the work of the Clinic was temporarily suspended. The Clinic resumed operations in the Fall of 1946. The College of Law is quite conscious of the need of developing certain technical skills in law students and the Legal Aid Clinic has been found to be a very effective, practical agency for developing skills both in law office practice and trial work. Every senior student does a tour of duty in the Clinic for one quarter. There he has opportunities to meet clients, interview witnesses, prepare pleadings, and other legal papers and actively participate in the conduct of litigation under the direction of a practicing attorney. The Clinic performs an important public service since the people who enjoy its benefits are persons of such limited financial means as to be unable to retain counsel. It works in close cooperation with the Columbus Bar Association, the Family and Children's Bureau and other social agencies.

Law Building.—The College of Law is very inadequately housed. This would be true even were the College to recoup immediately the large amount of basement space now used by units of other colleges.

The rapid expansion of the library will soon exhaust all available stack space. There is no appropriate space for the processing and handling of books. Nor is there sufficient office space for the library staff.

There is no classroom large enough to hold the first year class. Present facilities include but one seminar room.

There will not be enough offices for

the faculty when it has reached full strength, nor is there space for research assistants and graduate students.

The Student Bar Association and the Law Journal are meagerly housed. This need could be met in the present building were all the basement space restored to Law College use.

There is no court room in the present building. Such a room is a much-needed facility in aid both of the practice court work, in which all senior students participate, and of such moot court work programs as may be carried on by the College.

There is no lounging room for students in Page Hall. Such a room could, however, be provided in the basement were space released for the purpose.

The sustained emphasis in the College of Law is upon the development of the institution and its program, but it cannot be doubted that the progress of the College will be seriously hampered unless a more adequate physical plant is provided in the near future.

Law Dinner.—The annual College of Law dinner, which was a war casualty, was revived in the Spring of 1947. Circuit Judge Armistead Dobie gave an interesting address to an audience of 440 alumni, faculty and students. Newly elected members of the Order of the Coif, and other students who had won some distinction were introduced. It was the consensus that the dinner was an outstanding success and that this traditional affair should be recognized as a valuable means of cementing the relations between the alumni on the one hand and the faculty and the students on the other.

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College of Medicine

THE year 1946-1947, for the College of Medicine and the University Hospital, represents the high point, thus far, in their history, for two reasons:

(1) The return of faculty on war leave

has been accomplished, augmented by additional new full-time men in strategic areas, and followed by the release of young, recent medical graduates from the armed forces, to continue their interne and resident training programs on a full, peace-time scale.

(2) This year has seen the culmination of the first stage of the functional and architectural planning for the new Medical Center, with working drawings completed as of January 1, 1947.

The Nursing School presented the most serious problem during the year, primarily because of the sudden, alarming decrease in young women students entering this profession. The situation is not local, but nation-wide in its magnitude. In the attempt better to meet this situation here, the responsibility for Nursing Education and Nursing Service, which heretofore had been combined in one position, has been separated into the two areas, under Miss Frances McKenna and Miss Italia Sears, respectively. Under a joint Nursing Policy Committee of representatives of the Faculty of Medicine on the staff of the University Hospital, and the leaders in nursing education and service, it is believed that the best possible administrative organization to meet the present emergency is provided.

With the retirement of Dr. I. B. Harris, who had been for many years Chief of Staff at St. Francis Hospital, Dr. B. K. Wiseman, Chairman of the Department of Medicine, was appointed as the new Chief of Staff July 1, 1946. During the current year a very complete and effective reorganization of the teaching services in the 123 beds assigned to the University for clinical teaching has been accomplished.

In November, 1946, Dr. Verne A. Dodd, who had been Chairman of the Department of Surgery as well as Chief of Staff of the University Hospital for twenty-five years, asked to be relieved of the Chairmanship of Surgery, continuing, however, in his capacity as Pro-

fessor of Surgery. With the deep appreciation of not only the personnel in the Department of Surgery, but also the entire Medical College Faculty, for a quarter of a century of devoted and unselfish leadership, Dr. Dodd's resignation as administrator was regretfully accepted. A formal expression of the University's indebtedness to Dr. Dodd was made at a dinner in his honor this Spring. Dr. Robert M. Zollinger, Professor of Surgery, was elected as Dr. Dodd's successor, and on confirmation by the Board of Trustees, assumed this position on January 1, 1947.

In the area of Internal Medicine, a marked improvement in the graduate area, as well as in the undergraduate field of clinical education and training, has been effected under Dr. Wiseman's leadership, reflecting the peace-time release of essential personnel. Grand teaching Rounds were re-established for the House and Attending staffs. The post-graduate program in this department was continued as in past years with the special hematology seminar co-sponsored by the American College of Physicians, with 75 physicians coming from all over the United States in October, 1946. In March, 1947, a second week of General Post-Graduate Refresher Course work, particularly for returned veteran physicians was given, with 50 in attendance. Research activities resulted in the publication of more than 50 manuscripts from the Department of Medicine during this academic year. The chief personal and professional loss to the department during the year was that suffered through the sudden death of Dr. Solomon A. Hatfield, who had been a faithful and dependable member of the teaching staff of the department for many years.

Cancer investigation has assumed new importance and is receiving additional emphasis in line with the opportunities to divorce some research time from strictly war medical projects and objectives. A \$10,000 unrestricted gift estab-

lished the John Galbreath Cancer Research Fund. In January, 1947, the Board of Directors of the Columbus Cancer Clinic invited the Dean of the College of Medicine to succeed Dr. Andre Crotti as the new Medical Director of this community project, with the history of a quarter of a century of service in this area. This was made possible through the combining of the resources of the College of Medicine, the University Hospital and the Columbus Cancer Clinic, a united front, with an efficient elimination of duplication of effort and equipment.

The Franklin County Chapter of the Ohio Division of the American Cancer Society was organized in April, 1947, largely under the joint impetus and direction of the Dean of the College of Medicine, and Miss Elizabeth Grundy, Director of Medical Social Service at the University Hospital. Miss Grundy was drafted in April, 1947, to become the Commander of the Field Army of the American Cancer Society for the State of Ohio. Four thousand dollars were received from the Ohio Division of the Society in support of the Cancer Clinic at the University Hospital for 1946-1947, and funds accruing from the American Cancer Society's drive in April, 1947, which totaled some \$24,000, will be available for both local service and national research projects in the field of cancer during 1947-1948. Grants totaling \$25,000 already have been made by the Committee on Growth of the American Cancer Society, to the University, through the Departments of Medicine, Genetics, and Chemistry, to further fundamental cancer research,

Dr. H. G. Schlumberger joined the staff of the Department of Pathology as Associate Professor July 1, 1947, with a special background in the experimental approach to cancer. Dr. Arthur G. James comes from Memorial Hospital to the Department of Surgery with cancer as his main interest. Their research and

teaching will greatly strengthen the Cancer Program.

The radioactive isotope research program has been vigorously pursued, largely through the generosity of Mr. Franz Stone and his gifts to the College of Medicine, in honor of his father. The medical exploitation of the products of nuclear fission is continuing on an ever-enlarging scale, and Dr. William G. Myers, Julius F. Stone Research Fellow in biologic nucleonics, has just received a Grant-in-Aid of approximately \$15,000 from the U. S. Public Health Service Research Grants Division in recognition of the work in progress. Contracts were completed early in the academic year to receive shipments every three weeks of 300 to 500 millicuries of radioactive phosphorus from Oak Ridge, and clinical studies have been correspondingly increased and enlarged through this cooperation with the Government's Atomic Energy Commission. A publication is now in press covering the first six years of the clinical studies with radioactive phosphorus, and includes 100 patient records.

The Department of Pediatrics, working through the Children's Hospital, had a most effective year under the leadership of Dr. E. H. Baxter. Full and complete facilities for the diagnosis and treatment of poliomyelitis have been developed in cooperation with the National Foundation for Infantile Paralysis, and thus establish a treatment center for Central Ohio. A cooperative personnel liaison between the Departments of Orthopedic Surgery, Physical Medicine, Neuropsychiatry and Pediatrics has been set up. Dr. Warren Wheeler, full-time Associate Professor, and Dr. M. L. Scholl, Research Fellow in Pediatrics, have accomplished important studies in the Rh factor and its relationship to erythroblastosis in infants. Rh testing laboratories for Central Ohio have been established under their direction, and clinical facilities for the treatment of erythroblastosis in newborn infants have

been completed. A register of Rh negative donors has been established.

Dr. Thomas E. Shaffer has been added as a full-time Associate Professor to the University staff, working with appointments both in the Department of Pediatrics and the College of Education, and he is formulating and developing a comprehensive, model health program at University School. He also heads an inter-university Extended Health Education Project for Ohio, under the Kellogg Foundation, insofar as this University's cooperative relationship is concerned. A research grant of \$4,500 from the Southeast Lion's Club of Columbus has been the basis for the beginning study of the role of enzymatic hyaluronidase in rheumatic fever, in association with the Department of Bacteriology. In association with the State Department of Health, a series of Welfare Stations for infants and young children have been established throughout the City of Columbus. Members of the Department of Pediatrics are Physicians-in-Charge of six of these stations. Seven publications came from this Department in 1946-1947.

The establishment of the new Department of Obstetrics and Gynecology last year has continued to improve the teaching and research activities in these areas. The curriculum changes have resulted in a saving of 30 didactic teaching hours a year without sacrificing essential material. The residency training program in University Hospital has been expanded from one year to a four-year postgraduate teaching service, and a laboratory has been established which provides diagnostic service and other procedures essential to the diagnosis and management of those conditions peculiar to women. Dr. Phillip J. Reel, Chairman of the newly established department, in June, 1947, submitted his resignation, with the recommendation that Dr. Allan C. Barnes be made full professor and Chairman of this Department. As of July 1, 1947, this change was approved by the Board of Trustees, Dr. Reel con-

tinuing as clinical professor of gynecology within the Department. Nineteen publications were made from this Department during the current year.

The Department of Neurology and Psychiatry increased very materially its service and research activities when Dr. Milton Parker was added as a full-time member to the staff in the capacity of assistant professor, and a new, late-model 6-channel Grass electroencephalograph was installed in the University Hospital through the generosity of the Ohio Society for Crippled Children, in a gift to the OSU Development Fund.

Dr. Louis C. Roettig has been appointed Assistant Professor in the Department of Research Surgery, adding to the teaching and research activities in this area. The principal research of the Department has continued to center around the pathologic physiology of iodine as related to the diseases of the thyroid gland. Radio-iodine has been uniquely used in studies in autography in human goiterous thyroid glands. Twelve publications came from Dr. George M. Curtis' group during the year.

In the pre-clinical areas, the reflection of an unusually heavy service teaching load required unusual capacities from every department chairman. The individual teaching load has been very heavy. For example, in the Department of Anatomy during the Spring Quarter, 1947, there were 1,325 students, as contrasted with 750 in the same quarter of 1946. Despite this heavy load, 12 publications came from the Department of Anatomy.

In the Department of Pathology, the archives of pathology were completed during the year, which had lapsed during the war years. The autopsy percentage at University Hospital increased to 64, and the liaison between the Children's Hospital, the Columbus State Hospital, St. Francis Hospital and the Department of Pathology was strengthened through the special assignments given Doctors M. A. Spyker and R. V.

Milliser. A course on the pathology of old age has been added, along with other pertinent curriculum changes. Dr. George Shinowara returned in October, 1946, from his military leave of absence, and has strengthened the Division of Clinical Pathology in the Hospital; he is undertaking fundamental investigations again in the area of biochemistry. The residency training program in Pathology has been resumed on a full personnel, peace-time basis, which has involved some 12 physicians.

The service teaching load in the Department of Physiology has been extremely heavy also. Despite this fact, and a series of resignations, the research activities under Doctors Frank A. Hartman, Fred A. Hitchcock, and Emil Bozler have continued at a high level of productivity. Studies associated with the pituitary, the adrenal and the gonads have been carried forward, and work in aviation physiology and in metabolism continued under government support during this peace-time year, as a continuation of the war-time subsidies. Publications during the year numbered 19.

Dr. Norris Lenahan resigned as Director of the Department of Anesthesia of the University Hospital March 15. His successor, Dr. J. J. Jacoby (M.D.) received his Ph.D. in Pharmacology of Anesthesia at the University of Chicago. Dr. Jacoby has accepted a full-time position in charge of the Division of Anesthesia, with the rank of Associate Professor in the Department of Surgery.

Dr. Campbell Haynie, Assistant Medical Director of University Hospital, also assumed the responsibility as Assistant Medical Director of the Out Patient Department during the current year. Dr. Haynie served in the organization of the new, enlarged Resident Training Program, as well as in a teaching capacity in the Department of Medicine.

The University Hospital has shown a steady increase in the number of admissions and patient days, culminating during the year in total admissions of 10,148,

as contrasted with 8,681; hospital admissions in 1946-1947 with 97,285 patient days, contrasted with 93,686 patient days in 1945-1946.

The Dean of the College of Medicine has been appointed by the Surgeon General of the U. S. Public Health Service to a five-year term as Chairman of the Hematology Study Section under the Research Grants Division, with full responsibility for initiating, appraising and recommending for subsidy, investigations of worth anywhere, and calling special national research conferences, of which two have been held. Grants totaling \$297,000 have been made during the year, including \$5,600 for the Hodgkin's Disease investigations under Dr. Herman Hoster's direction.

The Dean has also served on the panel on Blood and Blood Forming Organs under the Committee on Growth of the National Research Council in the consideration of Cancer Research projects subsidized by the American Cancer Society. In this role, grant totaling upwards of \$100,000 have been made, including the sums already mentioned, which have come to the University.

As a member for some years, of the Research Committee of the National Tuberculosis Association, and as Chairman of the Research Committee of the Ohio Public Health and Tuberculosis Association, the Dean has been active in securing funds totaling approximately \$75,000 per year on national tuberculosis research projects.

As a member of the Advisory Medical Committee of the National American Red Cross, and more specifically as a member from its inception of a Subcommittee of Blood and Blood Derivatives, the Dean has obtained for special research purposes, the concentrated albumin and antihemophilic fractions of blood plasma for use in the Clinics, and is currently helping to establish and direct the new peace-time program for blood procurement under the National American Red Cross. The plan calls for

making available all of the many human plasma fractions, as well as whole blood and plasma transfusion units to the people of this country in their peace-time needs. This will provide, also, the basic organization and reserve materials for any future national emergency.

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College of Pharmacy

THE year 1946-47 was unusual in many respects. For the first time in the history of the college, the number of applications for admission exceeded the capacity of the college in terms of space and faculty. Hence, it was necessary to limit the number of admissions. Preference was given to those who had the best qualifications. It was difficult to obtain necessary additional equipment and supplies and what could be obtained was very slow in becoming available for use.

Undergraduate Enrollment.—The enrollment during the year was the largest in the history of the college. The total enrollment by quarters is given herewith:

	Undergraduate	Graduate	Total
Autumn Quarter ...	315	11	326
Winter Quarter	317	12	329
Spring Quarter	293	13	306

Enrollment in the lower classes was larger in the lower classes than in the advanced classes as is illustrated by the class enrollment for the Autumn Quarter given below:

AUTUMN QUARTER, 1946			
	Men	Women	Total
Freshman	117	24	141
Sophomore	77	22	99
Junior	26	20	46
Senior	16	8	24

Scholastic Standards.—Scholastic standards maintained by students were somewhat above previous averages. In this connection, it is to be noted that the average age of students enrolled was above that of prewar students. Apparently students were settled in their objectives and were making conscientious efforts to get the best education possible.

As an indication of the scholastic attainments, a total of 72 out of 315 undergraduate students made an average point-hour ratio of 3.00 or above on the basis of a possible 4.00 during the Autumn Quarter. This means that approximately 20 per cent of the students made an average record of B or above. Five students made a 4.00 point or straight A record. Distribution of honor students according to classes was as follows: Seniors, 30 per cent; Juniors, 33 per cent; Sophomores, 25 per cent; Freshmen, 18 per cent.

Graduate Enrollment.—As noted above graduate enrollments likewise increased. Graduate students were of great help in meeting the emergency needs for additional teaching staff. Several were appointed to positions as graduate assistants and assisted regular faculty members in the laboratories and routine duties. Four graduate students were awarded Fellowships by the American Foundation for Pharmaceutical Education. These awards ranged from \$1,000 to \$1,500 with additional funds to help defray student expenses such as fees, books, and supplies.

Pre-Professional Curriculum Adopted.—In the annual report for the year, 1945-1946, the need for expansion of the curricular offerings was discussed. Further intensive study was devoted to the problems referred to and an attempt was made to revise the four-year curricula so as to meet the requirements of a modern pharmaceutical education. This was found impossible. Hence, attention was directed toward a study of a five-year curriculum. This study was based on the fundamental concepts on which pharmaceutical curricula must be constructed.

A sound knowledge of certain basic and fundamental subjects is essential for a thorough understanding of pharmacy. These include English, Chemistry, Botany, Physiology or Zoology, Mathematics and Physics. Heretofore, these subjects have been intermixed with the profes-

sional courses and so arranged as to precede the professional courses for which the fundamental courses were presumed to be basic. Based on experience, it has been found that such an arrangement involves disadvantages to the student. It has been found more advantageous to the student to complete these basic and technical courses before enrolling in the professional courses in the case of some of the other health professions.

The need for new and enlarged technical and professional courses made necessary by recent developments in cognate sciences was likewise recognized. The need for opportunity for some degree of specialization such as offered by business courses, hospital pharmacy programs, additional scientific courses, was carefully considered. Careful consideration was also directed toward the civic obligations of a citizen of our present day world and the educational requisites which should be included in a modern college curriculum to give the student the outlook and cultural qualities of an educated man.

Intensive study was devoted to the manner in which the curriculum should be enlarged. It was deemed the most logical alternative to establish a pre-professional curriculum, to include all basic and technical courses and a choice of cultural and "broadening" courses, and a professional curriculum to include professional courses and some electives to permit specialization.

Briefly, a two-year pre-pharmacy curriculum followed by three years of professional training appears to be the most logical answer to the problems heretofore discussed. This pattern offers advantages to students and faculty. The student may complete his pre-pharmacy work not only at Ohio State but also at other accredited colleges and universities, nearer home and probably less crowded. A well-rounded education necessary to the professional man in close contact with the public is provided for. Increased opportunities for specialization in the

various fields of pharmacy are made possible. Four full summers between academic years allow time for completion of apprenticeship training. Of importance to the instructor is the fact that it will be possible to teach his courses on a higher plane whereby the student will benefit from a more intensive quality of instruction. Of utmost importance and significance to all concerned is the fundamental concept that not only will the graduate be better trained and qualified for his profession but he will be better educated to meet his obligations as a citizen. Not only will the student be trained to qualify for the present day needs of professional practice but will have the basic and fundamental training which will enable him to keep pace with scientific and professional developments of the future. When we consider that the working period of a professional man approximates 35 to 40 years, an investment in the form of a well-rounded education will pay dividends not only in terms of dollars and cents but in terms of satisfaction to the individual and service to mankind in general.

Ohio State is the first college to announce the adoption of a five-year curriculum. Hence, this has been the subject of editorial comment in several professional journals. For example, in the May, 1947, issue of the *Journal of the American Pharmaceutical Association* (Practical Pharmacy Edition) the following statement is noted. "This may well mark another turning point in the progress of Pharmacy. Since we have sixty-seven colleges, it is well that a few strong institutions have the initiative and courage to pioneer in meeting the needs of modern pharmacy. It is noteworthy that Ohio State has taken the lead in practical application of progressive concepts to fashion tomorrow's pharmacists; for this institution is credited with first making the four-year course compulsory (although it had been first offered optionally at other schools.)"

"Like the early four-year curricula

that awakened pharmaceutical education to new horizons, the 'heresy' of a five-year program will run the gauntlet of critical inspection and comment."

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Veterinary Medicine

THE school year 1946-1947 presented many problems in the field of Veterinary Education. The need for professionally trained men in the field of Veterinary Medicine is the greatest in the history of the profession. The fields of general practice, public health, regulatory work, commercial serum and biologic production, education and research, are all in need of specially trained personnel in Veterinary Medicine, to meet the demands of present day health standards and the modern accelerated program of agriculture.

The activities of the Veterinary Corps during the war in maintaining the fighting strength of our armies, through the rigid inspection of all food and food products to insure their wholesomeness both at their origin and at the point of consumption; their activities as members of special medical units on specialized missions in the various theaters of operation; their services in the laboratories in the production of serums and biologics for the protection of our fighting men; and last but not least, the veterinarians on the home front, who through their efforts prevented any serious outbreak of disease among the livestock population of our nation, thus protecting one of the most important food supplies; all these activities focused attention to the Veterinary profession and the contributions our Veterinarians are making to the social and economic welfare of our country. As a result, the year 1946-47, presented an unprecedented demand for admission to colleges of Veterinary Medicine.

At present there are only ten accredited Veterinary colleges in the United States, all but one of which are state-

supported institutions. With the great number of applicants for admission, very few non-resident students could be admitted to Veterinary Colleges. This resulted in the establishment of four new Veterinary Colleges during the year and two additional in the process of building physical plants and assembling faculties.

In the next few years the classes being graduated by Veterinary Colleges will be only about one-third normal size; entirely inadequate to meet the normal needs for replacement in the profession. Consequently the next few years will be particularly trying times for the colleges to maintain their faculties and expand their programs in keeping with the present requirements of the profession.

For the Freshman Class this year, 73 students were selected; nearly all of whom were veterans. In age they were five to six years older than the usual freshman class and generally speaking, far more serious minded. Many fine young men who would no doubt be a real credit to the profession, had to be denied admission due to the lack of adequate physical facilities and personnel.

During the year the following changes and additions were made in the faculty personnel. Dr. Walter G. Venzke was appointed Assistant Professor in the Department of Veterinary Preventive Medicine, Dr. Robert E. Habel was appointed Instructor in the Department of Anatomy, Dr. William Ingalls, Instructor in the Department of Pathology and Dr. Francis Fox, Instructor in the Department of Veterinary Surgery and Clinics. At the close of the school year Dr. Leonard W. Goss reached the age of retirement after having served as Professor and Chairmn of the Department of Pathology for 27 years. Dr. Clarence R. Cole was appointed Chairman to succeed Dr. Goss.

The presence of New Castle Disease in Ohio, and its threat to the poultry industry emphasized the need for adequate Poultry Disease Diagnostic Service in the state. A request was made

to the Ohio State University administration by the Ohio Poultry Council that a laboratory of this kind be established in the Veterinary Pathology Department. The funds were appropriated and the laboratory is operating under the supervision of Dr. William Ingalls. This has provided excellent teaching material for our students and has presented problems for research. It has stimulated much greater interest in poultry diseases among both the student and faculty. We feel that this has been a real contribution to our College program and in addition it has provided a very important service to the poultry industry.

The Research program of the College is being expanded as rapidly as possible under existing conditions. Some important diseases are under investigation by our staff members and important contributions have been made to the available knowledge in several fields. A virus disease of baby pigs which caused severe losses to the spring pig crop, here in the state, has been under investigation. The outbreak of the disease in Ohio is only the second report of the disease in the United States; several phases of New Castle disease are under investigation. Research is also under way on Brucellosis, Mastitis, Coccidiosis and Hog Cholera Virus attenuation. There is such a great need for Research in animal diseases, many of which have a direct bearing on public health that it is regrettable that we are not able to make a greater contribution. The chief difficulties preventing the expansion of the Research program, is the inadequate physical plant and the lack of personnel.

Two conferences for Veterinarians were held during the year. A laboratory short course designed as an aid to diagnosis was held during the week of September 16-21. The attendance was limited so as to insure intensive personal instruction. This course was enthusiastically received and will be repeated from time to time as occasion permits. The annual conference for Veterinarians

was held again this year, with over 400 in attendance. These conferences serve a definite need by bringing the newer knowledge of Veterinary Medicine to the members of our profession; of equal importance, however, they are especially stimulating to the faculty who are responsible for their development and for active participation in the program.

Over the year faculty members have been most active in extra curricular professional affairs. Many have appeared on State and National Veterinary programs. Several held responsible positions in National, State and local Veterinary organizations. Also a series of broadcasts on Animal Health have been conducted over Station WOSU by members of the faculty.

A faculty committee has been studying a revision of the College curriculum. This work is continuing and present indications point quite definitely that two years pre-professional college training may be necessary.

A report of this kind would not be complete without pointing out that the College cannot hope to maintain the high place in the field of Veterinary Education which it has always enjoyed unless expanded building facilities are soon provided. There is no space available for animals for Animal Disease Research. The only facilities for Animal Disease Research is at Reynoldsburg, Ohio, which is twenty miles away. This distance is quite a handicap to men engaged in full-time teaching program and is not conducive to a well-organized Research program. Furthermore, it is not readily available for student teaching purposes and the stimulation of student's interest in the field of Research.

Since 1910, there have been no additions to the physical plant. In the present location, expansion is impossible, consequently a whole new group of buildings in a new location will be necessary. This past year the faculty has carefully studied the problem of the physical facilities needed for the various departments for

the proper training of veterinarians for the present and future. Adequate space for both teaching and Research must be provided to carry on a well-rounded program. A report of the study is now in the making.

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Twilight School

THE Twilight School through the past year has been under the direction of L. K. Cooperrider who was appointed to this post after Dr. Norval Neil Luxon became Assistant to the President. No attempt has been made to expand the program because of the heavy strain placed upon all the University's resources by the day load. The enrollment of partial-schedule people has increased each quarter but not to the extent that may be predicted if and when the day load becomes lighter.

The work of the Twilight School has been for the most part in 31 departments of the Colleges of Agriculture, Arts and Sciences, Commerce, Education, and Engineering; the Schools of Home Economics, Social Administration, and Music. The spread of courses is from the freshman level to and through the completion of the requirements for the Ph.D. degree. The average age of Twilight School students is somewhat above that of day students. About 20 per cent of the total are veterans. In the four quarters of the year, Twilight School offered approximately 400 courses with a total of 10,250 class registrations.

The Graduate School Center at Wright Field under the joint direction of the Twilight School administration has continued to increase in importance and strength. There too, as on the campus, the limitations have been largely that of insufficient staff. Through the past year, 71 courses on the graduate level have been given with a total of 1,108 class registrations in the areas of mathematics, chemistry, and physics; aeronautical, chemical, electrical, and me-

chanical engineering; business organization, physiology, and psychology. In so far as has been determined, this project is unique.

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Research Foundation

DURING its eleventh year of operation, the Research Foundation has continued to strive to maintain close cooperation with both industrial and government organizations in researches of mutual benefit to the University and to the cooperating organizations and which contribute to the national welfare. Despite limitations on laboratory facilities, the scope and volume of the cooperative research program have shown a substantial increase over those of the previous year. This evidence of the value of the program is gratifying and the Foundation, as an integral part of the University, looks with confidence to its further assistance to The Ohio State University in achieving an outstanding position in graduate research.

The function of the Foundation is the organization, integration into the University research program, and administration under contract of researches of mutual interest and value to the University and to industry and government. These researches, sponsored by the cooperating organizations, are carried out in the University laboratories under faculty supervision. Under this program, in cooperation with the Graduate School and the different Colleges and their Departments, the Foundation plays a significant role in increasing the effectiveness of research in the University, and by the promotion of a close relationship between the University and the cooperating organizations for the support of graduate instruction, the furnishing of valuable supplementary training and development of scientific investigators, and the solution of problems of mutual interest and concern, in performing an important public service.

During the past year, 113 cooperative research projects were in active operation. Fifty-five of these were sponsored by industrial firms or associations and 58 were sponsored by agencies of the government. These researches, covering a diversified range of public interest, were conducted in the laboratories of the following 30 departments of the University: aeronautical engineering, agricultural chemistry, agricultural engineering, agronomy, bacteriology, ceramic engineering, chemical engineering, chemistry, dairy husbandry, dairy technology, dentistry, electrical engineering, Engineering Experiment Station, fine and applied arts, Franz Theodore Stone Laboratory, home economics, mathematics, mechanical engineering, metallurgy, pathology, pediatrics, physics and astronomy, physiological chemistry, physiology, poultry husbandry, psychology, surgical research, veterinary medicine, veterinary surgery, zoology and entomology.

During the year 508 individuals, appointed by the Board of Trustees of the University, participated in the research projects on a full- or part-time basis. These included 101 members of the University faculty who served as supervisors, consultants or investigators. In addition, a considerable number of persons was employed on an hourly wage basis.

A significant factor in the accomplishment of an important purpose of the Foundation, namely, the training and development of research personnel for the needs of the country, is the employment of graduate students on the researches. One hundred and eighty-two members of the research staff were registered in the Graduate School and 47 of them received advanced degrees, including 14 Ph.D.'s.

The publication of scientific articles on the researches carried out constitutes another important aspect of the work of the Foundation. In the past year, the members of the research staff presented 46 papers before national scientific societies and contributed 73 articles on the

work of the projects to national scientific or technical journals.

During the year, the Foundation appropriated \$25,000 from the Research Reserve to the University for the support of fundamental research. These funds were allocated to the support of researches in 16 departments of the University.

Since the development of the Research Foundation is directly coordinated with that of the University, it shares the needs of the University in its efforts to become one of the world's leading centers of learning. The two basic needs are adequate, competent staff to direct fundamental research and stimulate the development of graduate students and adequate laboratory space and facilities for research projects to supplement present limited facilities.

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School of Aviation

THE activities of the School of Aviation during the year July 1, 1946, to June 30, 1947, were confined principally to flight training and flight research at the Ohio State University Airport, and to promotion of Aviation Research in the other Departments of the University. Colonel Otto L. Brunzell acted as Director of the School from June 30, 1946, through March 10, 1947, at which time Mr. C. J. Peirce was appointed Director.

The National Research Council Program, known as a Visual Study, which was started in the previous year was continued during the current year, and was completed at the end of the Winter Quarter. The total number of students receiving flight training under both the National Research Council and the University flight training program is shown for the various quarters in the table listed below:

Quarter	NRC Students	Other Students	Total
Summer, 1946...	34	105	139
Fall, 1946.....	34	56	90
Winter, 1946....	37	53	90
Spring, 1947....	0	111	111

The data obtained in the Visual study, which was conducted under the direction of the Department of Aviation Psychology, is now being analyzed by that Department, and the results will be made available later in the form of reports. An additional flight research program was conducted at the Airport for the National Research Council and the Department of Aviation Psychology, during the latter part of the Spring Term. This program was known as the Stall-Learning Program. Instrumented flight work was given to a total of 48 students, using two Piper Cub airplanes equipped with a special Stall-Warning device. A statistical study of the results of this program is now under way in the Department of Aviation Psychology.

As can be seen from the above table, the average students per quarter for the year were 107, as compared with an average of 43 for the year previous. The increased number of students were satisfactorily handled by complete utilization of all planes at the Airport; and in view of the fact that present tendencies indicate a decrease in the G.I. Flight Training enrollment in the future, it is expected that the future flight load can be satisfactorily handled without the purchase of additional airplanes.

The Aviation Psychology Department in conjunction with the National Research Council is doing preliminary work on other research programs which will eventually be handled at the Airport. The regular flight courses of primary, secondary, instructor, and instrument training, along with the accompanying Ground School courses were offered during the year.

Considerable research work directly and indirectly connected with aviation was carried on by various Departments of the University. The work in high altitude physiological effects, including explosive decompression, was continued in the Department of Physiology. An extensive program concerned with the synthetic production of Hydrocarbon

fuels was continued in the Department of Chemistry. The Department of Physics conducted research work in micro-waves, nuclear physics, optometry, and other problems related to aviation. The Department of Mechanical Engineering is carrying on research projects dealing with the flow in gas turbines, rockets, and other types of propulsion devices. There are numerous programs of a restricted nature involving electronics, which are being carried out by the Department of Electrical Engineering.

In accordance with the University policy, for promotion of research at the Airport, additional equipment and laboratory space are being provided for this purpose. It was hoped that with the gradual decrease of the G.I. Flight Training Program, that the activities of the Airport will be supplemented by a variety of research programs to be conducted in cooperation with various Departments of the University.

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Dean of Women

WITH THE influx of veterans there was a decrease of 800 in the enrollment of new women students in 1946. Total women students was 6,200 as compared with 6,500 the previous year. In the veteran enrollment were approximately 300 women veterans.

During the summer of 1946, appeals to the public for rooms for students netted very few for women. Household-ers seemed to prefer to rent to men. Returning and prospective students and their parents were in a state of confusion due to the publicity about room shortages and the Baker Hall court case. In spite of all of this and the policy of not accepting out-of-state women, 3,600 out-of-town women were housed for the school year 1946-47. To offset the loss of space in privately owned houses the capacity of all University residence halls and private residence halls was increased by converting single rooms into doubles

and some doubles into triples. Throughout the year, meetings with residence hall staff members, presidents of University houses, sorority houses and co-operative houses were held to integrate the housing program for women and keep in touch with all problems which arose.

Because of the large total enrollment, a greater effort was made to help women students adjust to and feel a part of the University.

The training course for student counselors in women's residence halls, Psychology 581 was taught in the fall and spring quarters. Study habits, time budgeting, campus activities, social usage and personal adjustment were some of the areas discussed. During the fall, 93 upperclass women took the courses and each had a group of advisees in her residence hall with whom she worked. In the spring, 47 prospective counselors took the course in preparation for similar service this fall.

Those out-of-town students not in the dormitories attended meetings with the Dean of Women or had personal conferences with a staff member.

Women's Ohio, a Student Senate organization, started a counseling program with the freshman girls living at home.

The facilities of Pomerene Hall were taxed to the limit in lounge space, in meeting rooms, and for social functions. Office space was at a premium and during the rush hours the demand for meeting rooms was far in excess of the capacity. During the spring quarter, an arena performance of "The Importance of Being Ernest" was given in the Grand Lounge each weekday night for three weeks under the direction of the speech department. Teas and receptions where food was served increased from 72 the previous year to 91. About 100 girls worked on the Pomerene Activities Council sponsoring dances in the Gymnasium on Saturday night, bridge lessons and general open house programs. A weekly news sheet, "Scoop," was pub-

lished by this Council giving the activities of the building. The constitution of the Pomerene Board of Control was revised and membership on the Board extended to include more faculty and students.

A program for graduate students was advised by a staff member, one large party being held each quarter and during the summer a series of weekly tea talks with some faculty member speaking informally. Teas were sponsored by the office also for the various women's honoraries, head residents and other groups.

A Social Board was organized this year with student representation to plan and control the social program of the campus. This staff worked with the staff of the Dean of Men's Office in starting the organization.

During the year, 74 were initiated into Alpha Lambda Delta, the freshman women's honorary requiring a 3.5 point-hour ratio for membership. The activities of the group were carried on through this office.

A total of 105 girls took advantage of the short-term loans (usually under \$10). Of all the loans made in this office only four remained unpaid at the end of the year.

The Vocational Information Council returned to a plan of a single consolidated three-day conference, held on February 13, 14 and 15. Mrs. Marguerite Zapoleon of the Women's Bureau, U. S. Department of Labor, spoke at the opening session on Thursday afternoon, and Dean Alice Lloyd of Michigan addressed the Women's Assembly that evening. Twelve two-hour conferences were held on Friday, three running concurrently, on vocations open to women. Speakers came from all sections of the country to participate in these discussions. Saturday morning was devoted to the home economics fields. Saturday afternoon's windup was a panel on the topic, "I Want to Work with People." Attendance at the meetings was about 2,000.

Of the 4,000 non-sorority undergradu-

ate women attending daytime classes, 900 joined one of Pleiades' 20 friendship groups. Of these, 375 new members joined during Pleiades' fall quarter program of teas, coke parties and open meetings, and 80 later in the year. Each group carried on a full program of social activities, on campus and in the community. Banded together, Pleiades cooperated on all campus drives, entertained 175 of the University's women veterans at a Coffee Hour at the President's house, twice made 2,400 holiday favors for patients at the Chillicothe Veterans' Hospital, raised \$200 to help a needy mother by "adopting" her new baby, and ran two successful formal dances. Delegates to the December Intercollegiate Conference included "independents" from 15 campuses in four states. The February inter-group competitive "Stunt Night" aroused University-wide interest in the originality shown in costumes and skits. At Pleiades' annual Scholarship and Awards Banquet, 155 members were honored for point-hour ratios of over 3.

The total number of women pledged to sororities during the school year was 586 while last year's total was 646. The total sorority membership was approximately 1,500. At the Scholarship Banquet given at the Neil House in November, it was reported that the cumulative point-hour ratio for active members of sororities was 2.75, that 29 actives and 17 pledges had maintained a 3.5 or better point-hour ratio, and that two actives and one pledge had maintained a 4.00.

It was an active year for Panhellenic as it participated in numerous campus-wide drives, planned exchange dinners and bridge parties for its members, and gave several sorority-faculty teas to better acquaint sorority women with the faculty. The traditional pledge and active sings were held and the Panhellenic projects committee helped to provide entertainment for the Veterans' Hospital at Chillicothe. A Treasurers' Clinic

was arranged for the benefit of sorority treasurers; and officers, alumnae, actives and pledges of sororities took an enthusiastic part in the Panhellenic Workshop held in the spring. All sorority members joined for a mass meeting in University Hall to hear three officers from the National Panhellenic Congress speak.

The Women's Self Government Association stressed self government in its activities and has been carrying out an educational program in the individual housing units. It is in the process of reorganizing Mirrors, the freshman organization, and Links, the upper class organization.

The state association of Mothers' Clubs celebrated its tenth anniversary with 96 members of county clubs attending a meeting in November at the Faculty Club. President Bevis was the principal speaker and a program was held in cooperation with members of the Dads' Association. A total of \$563.13 was given to the Emergency Scholarship Fund which has been made available to men students as well as women students. A sum of \$167.50 was contributed to the Student Loan Fund.

Along with all the activities of the women students a concentrated effort was made for personal conferences with students. Close cooperation with faculty members and other agencies on the campus was encouraged as a part of a constructive program.

* * *

Dean of Men

THE load in this, like other administrative offices, varies in proportion with the enrollment. The largest enrollment in the history of the University brought new problems and necessitated new techniques.

Housing bulked largest in importance. It was recognized that the private homes of the city of Columbus would have to provide the majority of the new space

required, and in mid-summer an H-Day was planned which would focus the attention of the community on the need for rooms. Splendid cooperation was had from local newspapers, radio stations, churches, and moving-picture houses, and as a result the entire county responded. Some rooms were unsuitable from the standpoint of housing conditions or location, but students scattered all over the city and county and carried on in spite of difficulties.

The Navy Station Dormitories, never popular because of the eight-mile bus ride and the comparative isolation, reached their highest occupancy (500) at this time. Permission to use some barrack buildings at Fort Hayes was obtained just before school began, but only a few students were interested in this type of accommodation, and the project was closed within a few days.

Baker Hall, which had been occupied by women students since September, 1945, was returned to the men for the Summer Quarter, but re-occupied by women as the Autumn Quarter began. The University loaned 90 double-deck beds with mattresses to fraternities and sororities to enable them to increase their housing capacity.

A Trailer Camp which cares for 186 trailers was established at the State Fair Grounds. These were student-owned trailers and the venture was well worthwhile. Because the State Fair required the entire area, it was planned to house occupants in Neil Hall from July 19 to September 8 and to store the trailers on the campus.

After many disappointing delays, the first buildings of the River Road Housing Project were occupied by the University January 2, 1947. Most of the 470 occupants were former residents of the Navy Station, which was closed at this time.

The Stadium Dormitories operated at over normal capacity for the entire year, though under a number of handicaps such as lack of dining-room and study

space due to alterations and additions to the structure. A fire, originating in the new construction in March, made the entire first floor of the Buckeye Club untenable during the spring quarter.

Student organizations came back with a rush. Many of the coeducational groups had been operated almost entirely by women during the war period. This practice changed almost overnight, and many organizations composed exclusively of men were revived. The Dean's Office now lists 275 recognized groups.

The Student Senate was enlarged by the addition of representatives of several organizations both new and re-activated. The Student Court had a difficult year due to the enormous load of traffic cases. More than \$11,000 in traffic fines was assessed. This load demanded more time than students should be asked to give extra-curricular activities, and a new procedure for handling traffic cases next year has been approved. In the future, only appeal cases will be handled by the Court and fines will be collected by the Service Department rather than by the Financial Aids Office, as at present.

Although loans are now handled by the Financial Aids Office, the Dean of Men's Office still administers a small fund granted by the Development Fund for emergency aid to students. Few students will accept gifts and the money is usually repaid. Three hundred and fifteen checks totaling \$4,950 have been written on this account, which is founded on an allotment of \$350 per year from the fund.

Several campus "drives" have elicited wide interest. The Student Senate has backed three very successfully, namely, the World Student Service Fund, which raised \$4,500 for the second year in succession, and the Red Cross, \$1,550. The Senate also assisted in the campaign to enlist student support of the New Union project. Thirteen thousand students signed petitions asking the Board of

Trustees to assess an additional \$5 per quarter to finance such a building.

Fifty-seven fraternities are now active in what can be regarded as one of the best fraternity systems on any campus. Membership totals 3,802. Buying through the Fraternity Managers's Association cooperatively, they spent this year \$620,000. Operating a house with an annual budget of \$30,000, as many do, is a good deal to ask of boys whose scholastic program rightfully demands most of their time. The Student Auditor's Office has helped greatly at this point through friendly counsel and insistence on some essentials of good business operation. Lester G. Brailey, during the first half of the year, and Mylin H. Ross during the second, have been good counselors on fraternity policies, and their work has been highly appreciated by the boys themselves. Mr. Brailey and Donald G. Schroeter were authors of a "Pledge-Training Manual" which received high acclaim, and which had nation-wide distribution.

The Student Auditing Office audited \$1,720,000 during the year, which gives an idea of the magnitude of the student organization activity on the campus.

In an effort to provide a better-balanced social program for the campus as a whole, the Social Board was formed. This group consists of six elected students plus the Dean of Women, Manager of the Ohio Union, and the Dean of Men. The Council on Student Affairs delegated to this new group much of the responsibility for campus social life. Vice President Stradley secured a \$3,000 subsidy for the Board, but by careful operation, less than a third of this was needed. Considerable competition for dates was eliminated, and small parties organized for independent groups. Loans were made for campus-wide parties, and in a few cases, small losses were absorbed by the Board. This has been an experimental year, and the usefulness of the Board has already been established.

The Dad's Association Executive Committee was brought to the campus for an Autumn Quarter meeting. Mr. Elmer Huston of Xenia continues to serve as president of the Dad's Association.

The International House has been filled to capacity all year. Professor A. C. Stalnaker succeeded Dr. Robert Gerhard as Director of the House on January 1. Mr. Schroeter, of this office, has devoted a great deal of time this year to assisting foreign students.

As has been the practice in the past, every effort has been made to keep informed as to student problems and desires. This has been done not only through office interviews, but by wide participation in all types of student activity by all members of the staff.

* * *

Athletic Board

THE Athletic Board takes pride in listing a number of new men selected for the personnel under its direction. Appointments to the athletic staff are considered matters of public interest and participation, and when a vacancy is reported, the Board is bombarded with recommendations and suggestions. This interest is much appreciated and the wholehearted approval which has greeted the new appointments of this year is probably a result of the conscientious study given to every suggestion.

Anticipating the loss of L. W. St. John as Director of Athletics and Physical Education, the Board recommended as his successor Richard C. Larkins. In accepting the retirement of Mr. St. John, the Board officially recognized his long years of distinguished service and his outstanding contribution to athletics at this University, over the State of Ohio, and throughout the nation. It was realized that his record of unselfish consecration to the interests of the Ohio State University imposed an exceptional standard of qualifications for his successor.

Wesley E. Fesler was recommended as head football coach, and in order to complete the coaching staff in football, Loyal Clark and Richard Fisher were added in time for the spring practice. Floyd Stahl was secured as baseball coach, and W. H. H. Dye was made head basketball coach. Oscar L. Thomas was appointed to take charge of ticket sales.

There are many capable students interested in intercollegiate sports who do not meet the rigorous competition for the regular varsity teams. Because of this situation and to extend the advantages of competition to a larger number of students, the Western Conference has authorized intercollegiate games between "Junior Varsity" squads. In the Ohio State University, such squads were organized in football, baseball, basketball, track, and golf. One hundred and sixty-two students qualified for these teams and played 34 contests with 16 universities.

The Athletic Board is highly sympathetic toward such efforts to extend the advantages of athletics to all students and to so diversify the opportunities that there will be some activity for every student. To this end, the Board financed the purchase of horses for the opening of a course in equitation which furnished this facility to 102 women students.

Intramural sports for men which is partly financed by the Board, more than doubled the number of participants, with a total of 8,057 taking part in 850 teams. Of all the sports, basketball was the most popular, with 233 teams and 2,164 men competing. The enormous increase in interest meant a formidable increase in the necessary supervision, equipment, and space.

In intercollegiate competition, the University had a successful year. The swimming squad made an outstanding record under the direction of Mike Peppe. Of the six Western Conference meets, all were won which meant the Western

Conference championship. Ohio State won the National Collegiate Athletic Association meet and also the Amateur Athletic Union contest. Twelve of the 50 men in training were named on the mythical "All American" swimming squad. This successful year is a repetition for Mr. Peppe whose swimmers won the same three honors last year. No other university has won all three in one year.

The attendance at football games set new records at home and away. The total number of spectators at the nine games played was 603,600, and for the five games played here was 371,000. This unprecedented demand for seats in the Stadium was well beyond its capacity and many people, including members of the faculty, other University employees, and students were unable to see the games. This condition came very unexpectedly and suddenly and the system of ticket distribution which had worked so well in the past was totally inadequate to meet the situation. The demand for nearly twice as many seats as are available may not continue but plans for next year include two major changes which will assist in arriving at a more reasonable distribution of the seats available. A rearrangement and renumbering has added 6,000 places, and a system of priorities has been established which will set aside faculty, students, alumni, and visiting team blocks of seats starting in each case from the 50-yard line. The number of reservations in each block is based on known figures and while the total will probably be insufficient the general distribution will be on a sound basis. It will never be possible to satisfy the demands for certain popular games, such as Michigan, Purdue, and Minnesota. This year we could probably have sold 100,000 more seats for each of these games.

In most sports, the prospects for the coming year are good.

The Year in Review

THE rising trend in enrollment, which started after the end of the war in 1945, continued in the academic year 1946-47. The largest enrollment in the history of Ohio State University to date was reached in this period. During the academic year, 28,582 different students attended the University. The preceding year—also a record up to that time—saw 22,169 enrolled.

Sympathetic to the emergency needs of the University, brought about by the rapid return of veterans, the Ohio Legislature in early July, 1946, voted additional funds requested by the University and recommended by the Governor. The sum of \$1,993,564 for salaries, wages, maintenance and additions, and betterment was appropriated in a special session.

Later, in regular session in 1947, members of the Legislature granted the University a substantial increase with an appropriation totaling \$41,172,700 for the 1947-1948 biennium. Major divisions of the total sum consisted of \$17,569,000 for personal service, \$4,962,700 for maintenance, and \$18,641,000 for the construction of additions to University buildings, certain other improvements and the erection of new buildings.

In line with an agreement reached by the Inter-University Council, composed of the six state-supported universities in the state, the incidental fee for students in most colleges at the University were increased, by action of the Trustees in February, from \$20 to \$30, effective in the autumn of 1947. Out-of-state fees were to be increased from \$50 to \$75.

The first units in the University's River Road Dormitories were completed early in 1947 and the first 500 of what was eventually to be some 1,200 single veterans moved in. Meanwhile, work was progressing on 152 units at the project for married veterans and their families.

Creation of an Ohio State University Housing Commission by action of the 97th Ohio General Assembly opened the way for future long-range expansion of the University's permanent housing, dining hall and recreational facilities for the students and staff. The chairman of the Board of Trustees, President of the University, and business manager were specified as members.

A number of major appointments to the University's staff were made during the year. Included were the following: Dr. Donald P. Cottrell became dean of the College of Education; Dr. N. Paul Hudson, dean of the Graduate School; Jefferson B. Fordham, dean of the College of Law; and Leo L. Rummell was designated dean of the College of Agriculture, to succeed John F. Cunningham who was to retire Sept. 1, 1947.

Appointments

Major appointments to the University staff included:

N. Paul Hudson, dean of the Graduate School.

Donald P. Cottrell, dean of the College of Education.

Garvin L. Von Eschen, chairman of the Department of Aeronautical Engineering.

Bernard S. Meyer, chairman of the Department of Botany.

J. Wayne Ley, assistant dean of the College of Commerce and Administration.

J. Willis Brown, director of housing.

Luke K. Cooperrider, director of Twilight School.

Frederic W. Heimberger, assistant dean of the College of Arts and Sciences.

William S. Guthrie, junior dean of the College of Arts and Sciences.

Hermann C. Miller, chairman of the Accounting Department.

Herschel W. Nisonger, director of the Bureau of Special and Adult Education.

William H. H. Dye, head basketball coach.

Floyd S. Stahl, head baseball coach.

Mylin H. Ross, assistant Dean of Men.

Freeman S. Howlett, chairman of the Department of Horticulture and Forestry.

Charles J. Willard, acting chairman of the Department of Agronomy.

Aubrey I. Brown, chairman of the Mechanical Engineering Department.

Carroll J. Peirce, director of the School of Aviation.

William G. Wilcox, director of Public Relations.

Garth W. Volk, chairman of the Department of Agronomy.

Wesley E. Fesler, head football coach.

Oscar L. Thomas, director of ticket sales and assistant athletic director.

Jefferson B. Fordham, dean of the College of Law (effective July 1, 1947).

Retirements

Twelve members of the teaching staff who retired this year were:

Dr. Frederic C. Blake, staff member of the Department of Physics and Astronomy for 39 years.

Professor Edmund S. Manson, member of the Department of Physics and Astronomy faculty for 39 years and director of McMillin Observatory.

Dr. Alpheus W. Smith, staff member for 39 years, chairman of the Department of Physics and Astronomy and, since 1939, dean of the Graduate School.

Professor Edgar C. Transeau, chairman of the Botany Department, staff member for 31 years.

Professor Arthur S. Watts, faculty member for 32 years, 30 as chairman of the Ceramic Engineering Department.

Professor Grace M. Bareis, for 30 years on the Mathematics Department staff.

Edith M. Sniffen, English Department staff member for 30 years.

Professor Albert B. Wolfe, Economics

Department chairman for 18 years and staff member for 23.

Professor William H. Stone, Education Department faculty member for 21 years.

Professor Frank R. Castleman, for 33 years a member of the Physical Education Department faculty.

Professor Robert D. Williams, staff member of the Philosophy Department and later the Psychology Department, with 29 years' service.

Lt. Col. Daniel F. Walker, head of ROTC elementary course since 1946, after 18 years' Regular Army Service.

Deaths

During the year, deaths of eight well-known staff members occurred, as follows:

Hughina McKay, emeritus professor of Home Economics, August 23.

Roscoe C. Sloane, Civil Engineering Department staff member, September 17.

Frank R. Castleman, emeritus professor, Physical Education Department, October 9.

Joseph H. Gourley, chairman of the Department of Horticulture and Forestry, October 27.

James E. Hagerty, emeritus professor and former dean of the College of Commerce and Administration, November 10.

Arthur E. Baggs, professor of Fine Arts, February 15.

Dr. Solomon A. Hatfield, professor of Clinical Medicine, March 23.

Oscar Erf, emeritus professor, Animal Husbandry and Agricultural Extension, April 28.

Berthold A. Eisenlohr, emeritus professor of German, June 20.

Graduations

A total of 2,801 persons were awarded degrees at the four quarterly graduation exercises. Speakers and the num-

ber of students receiving degrees each quarter were:

Summer—Professor Paul N. Lehoczky, chairman of the Department of Industrial Engineering; 498 graduates.

Autumn—William E. Wickenden, president of Case School of Applied Science; 398 graduates.

Winter—William E. Stevenson, president of Oberlin College; 552 graduates.

Spring—Bishop Michael J. Ready of the Columbus diocese; 1,353 graduates.

At the Spring Quarter Commencement, honorary degrees of Doctors of Law were awarded to James M. Cox of

Dayton, newspaper publisher and former Ohio governor; President Cecil Vincent Thomas of Fenn College; and the Rev. Frederick L. Brownlee, Bronxville, N. Y., executive secretary of the American Missionary Association. The honorary Doctor of Science degree was conferred on Dr. Edgar C. Bain, Pittsburgh, Pa., vice president in charge of research and technology of the Carnegie-Illinois Steel Corporation. E. C. Raney, Columbus, president of Ranco, Inc., was awarded the Lamme Medal, given annually to an alumnus who wins distinction in engineering.



Administration Building

